



Alaska Department of Transportation & Public Facilities REQUEST FOR PROPOSALS PACKAGE

(Procurement per Article 3 of AS 36.30)

PART

A

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ISSUING OFFICE

Agency Contact & Phone No..... : Aaron Hughes, P.E., (907) 269-0523
Contracting Division..... : Department of Transportation & Public Facilities, Central Region Design & Engineering Services

PROJECT

RFP NUMBER..... : 25202046
Project Numbers-State/Federal..... : CFAPT00501 & AIP 3-02-0054-XXX-20XX
..... : CFAPT00505 & AIP 3-02-0150-XXX-20XX
Project Site (City, Village, etc.)..... : Chefornek & Kipnuk, AK
Project Title & Contract Description..... : Chefornek Airport & Kipnuk Airport Rehabilitation Design Services

The Contractor shall provide professional design services to complete a bid-ready set of Plans, Specifications, and Estimate (PS&E). Services are anticipated to include: Environmental Services (including the preparation of the Environmental Documents and permits), Surveying and Mapping, an Engineer's Design Report (EDR), Construction Safety and Phasing Plan (CSPP), Electrical Design, Erosion and Sediment Control Plan (ESCP), Airport Layout Plan (ALP), and Assistance during Bidding and Construction.

SCHEDULE & PAYMENT

Anticipated period for performance-Begin/End: March 2020 to June 2023

Estimated amount of proposed contract:

☐ Less than \$200,000 ☐ \$200,000 to \$250,000 ☐ \$1,000,000 or greater
☐ \$250,000 to \$500,000 ☒ \$500,000 to \$1,000,000

Proposed Method(s) of Payment:

☐ Fixed Price Plus Expenses (FPPE) ☐ Firm Fixed Price (FFP) ☒ Cost Plus Fixed Fee (CPFF)
☐ Other:

SUBMITTAL DEADLINE AND LOCATION

*OFFERORS ARE RESPONSIBLE TO ASSURE DELIVERY PRIOR TO DEADLINE (2 AAC 12.250).
ONLY PROPOSALS RECEIVED PRIOR TO THE FOLLOWING DATE AND TIME WILL BE OPENED.*

DATE: **January 8, 2020**

PREVAILING TIME: **4:00 PM**

HAND DELIVER ONLY DIRECTLY TO FOLLOWING LOCATION (and person, if named):

Kathleen Bridenbaugh
PSA Unit Supervisor
4111 Aviation Avenue
Anchorage, AK 99502

IMPORTANT NOTICE: If you downloaded this solicitation from the State's Website, you must self-register for the Plan Holders list to receive subsequent addenda. Failure to register may adversely affect your proposal. It is the Offeror's responsibility to ensure that he has received all addenda affecting this RFP.

SELECTION PROCEDURE

1. Competitive Sealed Proposals will be evaluated by a committee (2 AAC 12, Article 4). Evaluation of responses to criteria set forth in Part C results in a numerical score for each proposal. Each criterion in Part C has an assigned weight for this RFP which demonstrates its relative importance. The total of all weights is 100 (100%). Each one-percent weight equates to a range of 0-5 points per Evaluator. The maximum points (score) obtainable for any proposal is equal to the product of 500 multiplied by the number of Evaluators.
2. Scoring of proposals will be accomplished as follows:
 - 2.1 Each Evaluator will individually read and rate each Offeror's response to each criterion described in Part C - Section I - Technical Proposal. Ratings will be based solely on contents of proposal and in compliance with the Contracting Agency's standard Instructions for Evaluation Committee. Except as may be stated within any criterion description in Part C, a rating of "5" = Best Response from all Offerors; "4" to "1" = Progressively Less Responsive; "0" = Non-Responsive. Ratings are multiplied by the assigned weights for each criterion to obtain criteria scores.
 - 2.2 After completion of individual ratings in Part C, Section 1, Technical Proposal, the Evaluation Committee will meet to discuss proposals. Evaluators may then alter their ratings; however, any changes shall be based solely on the criteria set forth in Part C.
 - 2.3 After scoring Part C - Section I - Technical Proposal, criteria scores for Part C - Section II - Preferences, and Section III - Price (if applicable), will be calculated based on criteria descriptions.
 - 2.4 The total score for each Offeror will be obtained by summing the scores determined for each criterion in Sections I, II and III of Part C. The order of ranking for negotiations shall be as follows: highest scored Offeror will be ranked first, next highest scored second, and etcetera.
3. Evaluators may discuss factual knowledge of, and may investigate Offerors' and proposed Subcontractors' prior work experience and performance, including projects referenced in proposal, available written evaluations, etcetera, and may contact listed references or other persons knowledgeable of a Contractor's and/or a Subcontractor's past performance. Factors such as overall experience relative to the proposed contract, quality of work, control of cost, and ability to meet schedules may be addressed. If any issues of significant concern to the proposed contract are discovered, the Committee may:
 - 3.1 Provide written recommendations for consideration during contract negotiations;
 - 3.2 Conduct discussions in accordance with paragraph 4, below.
4. The Committee may decide to conduct discussions (or "interviews") with responsible Offerors whose proposals are determined to be reasonably susceptible of being selected for award for the purpose of clarification to assure full understanding of, and responsiveness to, the solicitation requirements (AS 36.30.240 & 2 AAC 12.290). Offerors selected by the Committee for discussions may be permitted to submit Best and Final Offers (BAFO) for final Committee Evaluation. After discussions and any BAFOs, Evaluators will determine the final scoring and ranking for contract negotiations by evaluating written and oral responses using only the criteria set forth in Part C of this RFP (2 AAC 12.260(b)).
5. All Offerors will be advised of the Offeror selected for negotiation and, after completion of negotiations, a Notice of Intent to Award will be provided to all Offerors. If contract negotiations are unsuccessful with Offeror(s) selected for negotiation, the Contracting Agency may either cancel the solicitation or negotiate with other Offerors in the order of ranking.

NOTICES

PART

A

1. The Contracting Agency is an equal opportunity employer.
2. Copies of contract documents are available for review at the Contracting Agency's office. Offerors located outside the general vicinity of the Contracting Agency's office may telephone the Agency Contact identified on page one of this Part A for a discussion of such items.

General Conditions of the Professional Services Agreement are contained in the Small Procurement Standard Provisions Booklet, which is located on the Department's website under "Procurement."

The General Conditions are the **same** for both Competitive Sealed Proposals and Small Procurements.

3. Offerors are specifically advised that a contract shall not be in effect until a written agreement is executed by an authorized agent of the Contracting Agency. The Contracting Agency shall not be liable for any cost incurred by an Offeror in response to this solicitation, including any work done, even in good faith, prior to execution of a contract and issuance of a Notice to Proceed.

4. The Contracting Agency expressly reserves the right to waive minor informalities, negotiate changes or reject any and all proposals and to not award the proposed contract, if in its best interest. "Minor Informalities" means matters of form rather than substance which are evident from the submittal, or are insignificant matters that have a negligible effect on price, quantity, quality, delivery, or contractual conditions and can be waived or corrected without prejudice to other Offerors (2 AAC 12.990).

5. All proposals shall be open for public inspection (AS 36.30.230) after a Notice of Intent to Award is issued. Offerors should not include proprietary information in proposals if such information should not be disclosed to the public. Any language within a submittal purporting to render all or portions of a proposal confidential will be disregarded. Proprietary information which may be provided after selection for contract negotiations will be confidential if expressly agreed to by the Contracting Agency (AS 36.30.230).

6. Substitution for any personnel named in a proposal may result in termination of negotiations.

7. If it is discovered that a selected Offeror is in arrears on taxes due the State of Alaska, a contract may not be awarded until the Alaska Department of Revenue approves the payment provisions for the contract.

8. **Offerors and proposed subcontractors shall be in compliance with the statutory requirements for Alaska business licensing and professional registrations included in the certification statement on Page 2 of Part D in this RFP package.**

9. **PRICE COMPETITION:** Price cannot be an Evaluation Criterion in accordance with Article 3 of AS 36.30 for services that must be performed only by Architects, Engineers, Land Surveyors, or Landscape Architects (A/E, LS or LA)) licensed in the State of Alaska, UNLESS the provisions of AS 36.30.270(d) apply; i.e., unless the services required are repetitious in nature, and the nature and amount of services required are thoroughly defined by measurable and objective standards to reasonably enable firms or persons making proposals to compete with a clear understanding and interpretation of the services required. If price is a factor, a majority of the evaluation committee must be registered in Alaska to perform architectural, engineering, or land surveying services.

- 9.1 If the services performed do not require an A/E, LS or LA, then all Offerors including any A/E, LS or LA must provide Price Proposals in accordance with AS 36.30.270(b) and 2 AAC 12.260(c).

- 9.2 Price (or any estimate of labor hours) cannot be an Evaluation Criterion for contracts that will receive Federal-aid highway program funding per 23 CFR 172.7 and FAA Airport Improvement Program funding per AC 150/5100-14E, 2.1. For FAA exceptions: see AC 150/5100/14E, 2.4.

10. An audit of the selected Offerors' and proposed Subcontractors' cost accounting systems and business records may be required to ascertain if systems are adequate for segregating contract costs; to establish a maximum allowable Indirect Cost Rate for the Agency's negotiator; and to investigate the accuracy of proposed labor rates and unit prices. In order not to unduly delay contract negotiation or award, be prepared to submit Pre-Audit Statement, DOT&PF Form 25A257 immediately for your firm and any subcontract that may exceed \$250,000.

For contract amounts less than \$250,000, the Contracting Agency may require the Offeror and proposed Subcontractor to submit the Pre-Audit Statement if deemed necessary to determine allowable costs under Title 23 CFR requirements. If selected for negotiation, failure to submit properly completed Pre-Audit Statement(s) in a timely manner may disqualify an Offeror from further consideration. Information from Pre-Audit Statements and any Audit conducted for the Contracting Agency is considered proprietary and will be confidential.

11. Standard insurance provisions for Worker's Compensation, General and Automobile Liability, and Professional Liability are contained in DOT&PF Form 25A269, Indemnification and Insurance. Coverages may be modified under very limited circumstances. Offeror should not assume any modification of coverages.

12. Professional Liability Insurance for the proposed contract: ☐ is not required
☒ is required as shown on DOT&PF Form 25A269.

13. The proposed contract ☒ will ☐ will not be a Federally Assisted Program of the U.S. Department of Transportation. If it will be an assisted program, then the Offeror shall insert the following notification in all subcontract solicitations for bids or proposals pertinent to this RFP:

"In accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, CFR, U.S. Department of Transportation (U.S. DOT), Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. DOT issued pursuant to such Act, in any Subcontract entered into pursuant to this RFP, Disadvantaged Business Enterprise firms will be afforded full opportunity to submit bids or proposals and will not be discriminated against on the grounds of race, color, sex, or national origin, in consideration for an award.

14. Pre-proposal Conference: ☒ None ☐ As follows:

15. Special Notices:

15.1 Per Alaska Statute (AS) 36.30.210(e): An Alaska Business License is required of Contractors who do business in Alaska at time of award. To qualify for the Alaska Offerors' Preference, under AS 36.30.321, an Offeror shall have a valid Alaska business license as a prerequisite to proposal. Information regarding applying for an Alaska Business License can be found on-line at <https://www.commerce.alaska.gov/web/cbpl/BusinessLicensing.aspx> or by calling 1-907-465-2550. The business license must be in the name of the company under which the proposal is submitted.

15.2 Effective May 8, 2015, the Department, in coordination with the U.S. Department of Transportation, adopted a Race-Neutral Disadvantaged Business Enterprise (DBE) Program for its federal-aid program. The Race-Neutral DBE program applies to federally-funded construction-related professional services solicitations, with the exception of FAA-funded projects located within the boundaries of the Department's Northern Region, which remain under a Race-Conscious DBE program.

The Department encourages contractors to utilize DBEs in all Federal-aid projects to ensure the Department meets its overall DBE Utilization Goal. All DBE participation will count towards the Race-Neutral program. If you have any questions about this notice or the Department's DBE program, please contact the Civil Rights Office at (907) 269-0851 or refer to their website <http://www.dot.alaska.gov/cvlrts/index.shtml>

15.3 The Department intends to send notices (including Notice of Intent to Negotiate, and Notice of Intent to Award) to Offerors by using the email address provided the Offeror's submitted Part D. Such delivery of an email sent by the Department is complete upon receipt in the addressee's email account. An email sent after 4:30pm shall be deemed to have occurred at the opening of business on the next working day. By submitting a response to this RFP, all Offerors consent to the use of Electronic Mail as described herein.

15.4 Interested parties are reminded that the Agency point of contact is noted on page 1 of this section, and all questions and requests for information shall be directed to this individual.

15.5 The Contracting Agency anticipates providing the following services: Geotechnical Investigation, Hydraulic and Hydrologic, and Utility Agreements. The Contracting Agency reserves the right to accomplish these services by other means, including amendment of the Professional Services Agreement, as necessary.

15.6 The current Airport Layout Plan is available and may be viewed and/or downloaded from the following link: http://dot.alaska.gov/stwdav/airports_public_central.shtml

SUBMITTAL CHECKLIST

PART

B

Offeror may use left margin to check off items when completed.

An Alaska Business License is required of Contractors who do business in Alaska at time of award (AS 36.30.210(e)).

- [] 1. Offerors must carefully review this RFP Package for defects and questionable material, and become familiar with submittal requirements. Submit written comments to the address shown under "Submittal Deadline and Location" on page 1 of Part A - RFP. Substantive issues will be addressed in a written addendum to all RFP recipients on record. Failure to comply with directions may result in lower score and may eliminate a submittal from consideration. Protests based on alleged improprieties or ambiguities in a solicitation may be disallowed at the discretion of the Contracting Agency if the protest is not received in writing at least ten (10) Agency work days prior to the Submittal Deadline (AS 36.30.565).
- [] 2. Review Part A - RFP and the proposed Statement of Services and any other attached or referenced materials. If no Statement of Services is attached, telephone the Agency contact person identified on page 1 of Part A.
- [] 3. Review Part C - Evaluation Criteria. Read each criterion in light of the proposed Statement of Services. Note any project specific criteria which may have been added or any changes to standard criteria descriptions which may have been made. Be aware of the assigned weight for each criterion. If a weight is not entered for any criterion on Part C, notify the Agency contact person. Plan your proposal to address the applicable criteria. Criteria Responses shall not exceed the number of pages stated below. **Note:** If weight is applied to Criterion #11, Alaska Bidder (Offeror) Preference, that box must be checked on page 1 of Part D, rfp-d.
- [] 4. Prepare a distinct Response for each criterion that has a weight more than zero. Failure to respond directly to any criteria weighted more than zero will result in an evaluation score of zero for that criteria. Any Responses to criteria weighted zero will be disregarded. Acceptable Responses must be specific and directly related to the Contracting Agency's proposed Statement of Services. Marketing brochures, federal SF330s, marketing resumes, and other non-project specific materials will be discarded without evaluation and should not be submitted.
- [] 5. **Each criterion Response must be titled, numbered and assembled in the order in which the criteria are listed in Part C**, so the criterion to which information applies shall be plainly evident. Material not so identified or assembled may be discarded without evaluation.

- [] 6. Price ☐ is ☒ is not an evaluation criterion for the proposed contract.

If Price is a Criterion, prepare **Billing Rates and/or Price Proposals** as described in Criteria #12 and/or #13.

- [] 7. Complete all entries on Part D - Proposal Form. Note the statutory requirements for Alaska business licenses and professional registrations, and be sure to sign and date the Certification. Copies of licenses and registrations may be provided with submittal, and will not count in the requirements of #8 below.

- [] 8. Attach Criteria Responses (**except any Billing Rates or Price Proposals**) to Part D - Proposal Form. The maximum number of attached pages (**each printed side equals one page**) for Criteria Responses shall not exceed: **Twelve (12) which includes the schedule submitted in response to Criterion #9**. Attached page limit does not include the four-page Part D - Proposal Form, or any Billing Rates or Price Proposals.

Criteria Responses shall be presented in **8-1/2" X 11" format**, except for a minimal number of larger sheets (e.g., 11" x 17") that may be used (e.g., for schedules) if they are folded to 8-1/2" X 11" size. Large sheets will count as multiple pages at 93.5 square inches or fraction thereof per page, unless otherwise noted.

CAUTION: Criteria Responses which do not comply with the required page limit or presentation size, may result in disqualification. Further, small print or typeface that is difficult to read may negatively influence evaluation of your submittal and affect scoring for "Quality of Proposal."

CHECKLIST IS CONTINUED NEXT PAGE

- [] 9.
- [] 10. Parts A, B and C of Form 25A270 and the proposed Statement of Services shall not be returned to the Contracting Agency. **Submittals shall consist of the following applicable items assembled as follows and in the order listed:**
- [] 10.1 Completed Part D - Proposal Form (generally at least one copy with original signature) and Responses to all evaluation criteria -- **except Billing Rates, Price Proposals** – attached. Each copy shall be fastened with one staple in the upper left corner. No other form of binding shall be used and no cover and no transmittal letter will be included. **CAUTION:** Failure to comply with this instruction will negatively influence evaluation of Submittal.
- [] 10.2 Number of copies of Part D (**all pages**) and Criteria Responses (**except Billing Rates, and Price Proposals**) required is: **6 (six)**
- [] 10.3 If **Billing Rates and/or Price Proposals** are required, **one copy** bound with one staple in the upper left corner separately enclosed in a sealed envelope marked on the outside to identify it as a **Billing Rates or Price Proposal** and the names of the Project and Offeror. Each **Billing Rates or Price Proposal** must be signed and dated by the person who prepares it (may be different signatures for each Subcontractor).
- [] 10.4 If Item 9, above, is completed for this RFP Package, any submittal items described therein. Unless otherwise stated, one copy only, bound appropriately.
- [] 10.5 Pre-Audit Statement, DOT&PF Form 25A257, shall **not** be provided with Submittal. (See Notice #10 on page 3 of Part A - RFP.)
- [] 10.6 **CAUTION:** If you replicate (other than by photocopy) Part D or any form in lieu of completing the forms provided by the Contracting Agency, provide a signed certification that lists such forms and attests that they are exact replicas of that issued by the Contracting Agency. Changed forms may result in rejection at the Contracting Agency's discretion. Any alteration – other than completion of the required entries – may be cause for rejection without recourse.
- [] 11. Deliver **submittals in one sealed package** to the location and before the submittal deadline cited in Part A - RFP. **Mark the outside of the package** to identify the Project and the Offeror. Proposals must be received prior to the specified date and time. Late proposals will not be opened (2 AAC 12.250).

EVALUATION CRITERIA

PART

C

Criteria with a weight of zero are not applicable and should be disregarded. If a weight is not indicated for any criterion, telephone the Agency Contact person identified at the top of page 1 of Part A - RFP.

SECTION I - TECHNICAL PROPOSAL

1. Objectives and Services

1. Weight: 10

Response must **demonstrate your comprehension of the objectives and services** for the proposed contract. Do not merely duplicate the Statement of Services provided with this RFP. Also, consider if Statement of Services is sufficiently explicit; are expressed or implied schedules attainable/economically feasible; etcetera? Explain. **Define any assumptions made** in formulating Criteria Response. If design services for a construction project are included, express any opinions regarding alternative design considerations that could impact construction costs.

2. Methods

2. Weight: 15

Response must outline the methods for accomplishing the proposed contract or, if methodology is contained in the proposed Statement of Services, address its adequacy. Describe what, when, where, how, and in what sequence the work will be done. Address how proximity to the Project site, *particular* geographic familiarity, experience, and capabilities of your firms (Offeror and Proposed Subcontractors) and Project Staff might *specifically* contribute to the proposed methods. Identify the amount and type of work to be performed by any Subcontractors. Consider how each task may be carried out; what services or interaction required from/with the Contracting Agency; etcetera. Suggest alternatives, if appropriate. Identify any **distinct and substantive qualifications** for undertaking the proposed contract such as the availability of specialized equipment or unique approaches or concepts **relevant to the required services** which the firms may use.

3. Management

3. Weight: 10

Response must describe the administrative and operational structures that will be used for performing the proposed contract. For example consider: who will have overall responsibility for the contract? Who will have direct responsibility for specific disciplines? What will the lines of authority be? For any individual who would be in "responsible-charge" (reference AS 08.48) as an Architect, Engineer, Land Surveyor or Landscape Architect, so state and list his/her Alaska professional registration number. A graphic depiction is preferred in your response to this criterion. Additionally, the Contracting Agency may want to inspect work products in progress and have a close ongoing working relationship with your Project Staff. Accordingly, your response should also identify where the various contract services will be performed, *in proximity to the Contracting Agency's office*, and how communications will be maintained between your Project Staff, the Contracting Agency, and (as applicable) any other government agencies or the public.

4. Proposed Project Staff

4. Weight: 20

Response must name the individuals to perform the following **FUNCTIONS** plus any other professional/technical functions you deem essential to perform the services (see also Criterion #8):

1. Contract Management (contract compliance)
2. Project Management (single point-of-contact directly engaged in contract performance)
3. Civil Engineering*
4. Electrical Engineering*
5. Land Surveying* & Mapping*
6. Environmental Documentation/Permits

*All personnel acting in responsible charge for all Architectural, Engineering, Land Surveying, and Landscape Architecture functions require an Alaska Registration and must be identified in your proposal.

Continued Next Page

Describe the work to be performed by the individuals you name to perform essential functions and detail their specific qualifications and substantive **experience directly related to the proposed contract**. A response prepared specifically for this proposal is required. Marketing resumes often include non-relevant information which may detract from the evaluation of proposal. Lists of projects are not useful. Focus on individual's specific duties and responsibilities and how project experience is relevant to the proposed contract.

For each person named, identify their: employer, professional discipline or job classification and state of residency. List at least three (3) professional references (contact persons and telephone numbers) for each person.

5. Workload and Resources

5. Weight: 10

Response must: (1) discuss both current and potential time commitments of your proposed Project Staff to all clients; (2) discuss the projected workload of each firm (Offeror and Proposed Subcontractors) for all clients; and (3) demonstrate adequate support personnel, facilities and other resources to provide the services required. Provide a list of current contracts with the Contracting Agency in which your proposed Project Staff are participating. Include all contracts statewide with regions, divisions, etc., of the Contracting Agency.

Briefly address capabilities for providing additional services and/or services under an accelerated schedule. Address capacity to reassign personnel, equipment and facilities whenever the proposed contract would not require such capabilities or was delayed.

6. Past Performance & Quality Control

6. Weight: 15

Response must describe previous projects the project team has worked on that are related in size and scope to this project. Describe the dollar amount of the projects and a brief narrative of the successes of the projects. Address how the experience will help your team to perform under this contract. Provide references (contact name and phone number) for each project. Indicate which of the proposed firms and project staff was involved in each project. The State reserves the right to investigate referenced projects, contact references and research other projects that the respondent has worked on.

Include in your response a description of your firm's quality control process and how this process has affected the quality of your deliverables. Use specific examples.

7. Quality of Proposal

7. Weight: 5

Offerors do not respond to this criterion. Committee members will rate this criterion based on their perception of the clarity, completeness and presentation of submittal. Note: This criterion is **NOT** used to evaluate color, graphics or other visual techniques except as they may detract from legibility.

8. Proposed Project Staff Subject For Possible Added Services**8. Weight: 5**

Response must name the individuals to perform the following **FUNCTIONS** that may be added by amendment:

1. Geotechnical Investigation and Recommendations*
2. Hydraulic and Hydrologic Design
3. Utility Agreements

*All personnel acting in responsible charge for all Architectural, Engineering, Land Surveying, and Landscape Architecture functions require an Alaska Registration and must be identified in your proposal.

Describe the work to be performed by the individuals you name to perform essential functions and detail their specific qualifications and substantive **experience directly related to the proposed contract**. A response prepared specifically for this proposal is required. Focus on individual's specific duties and responsibilities and how project experience is relevant to the proposed contract.

For each person named, identify their: employer, professional discipline or job classification and state of residency. List at least three (3) professional references (contact persons and telephone numbers) for each person.

9. Schedule**9. Weight: 10**

The Department's desired milestones for the two projects are presented in Exhibit B-2 of the Proposed Statement of Services.

The schedule shall be in a Gantt chart format showing the duration of the activities, and start and finish dates. Demonstrate your plan to deliver acceptable work products as efficiently as possible. Distinguish between activities that are within your control and those that may be strongly influenced by others. Include agency comment periods.

Begin you schedule with receipt of NTP anticipated to occur on March 23, 2020.

Do not include estimates of resource usage.

The schedule may be presented on two (2) 11x17 sheets, which **will** be counted as two (2) pages towards the proposal page limits.

The negotiated agreement with the selected Offeror will include provisions obligating it to the performance in accordance with its proposed schedule. If the schedule is found to be unrealistic, the Contracting Agency may terminate negotiations and enter into negotiations with the next ranked firm.

SECTION II - PREFERENCES

10. Disadvantaged Business Enterprises

49 CFR 26

10. Weight: 0

This solicitation is being conducted under the Department's Race Neutral Disadvantaged Business Enterprise (DBE) program for construction related professional services solicitations. Therefore, there is no DBE goal for this solicitation and the criterion has a weight of zero (0).

See rfp-a, section 15. Special Notices, paragraph 15.2.

11. Alaska Bidder (Offeror) Preference

23 CFR 172.7(a)(1)(iii)(C), AC 150/5100-14E, and 2 AAC 12.260(e)

Weight shall be "0" if any federal funding, otherwise weight shall be at least "10".

11. Weight: 0

To be granted this preference:

Offeror must claim the Alaska Bidder (Offeror) Preference on page one of Part D Proposal Form. In claiming the Alaska Bidder (Offeror) Preference on page one of Part D, the Offeror is certifying that they meet the following requirements per AS 36.30.990:

- (A) Firm holds a current Alaska Business License;
- (B) Proposal is submitted under the name as appearing on the Firm's current Alaska Business License;
- (C) Firm has maintained a place of business within Alaska, staffed by the Firm or an employee of the Firm, for a period of six months immediately preceding the date of the offer;
- (D) Firm is incorporated or qualified to do business under the laws of the State of Alaska, is a sole proprietorship, and the proprietor is a resident of Alaska, is a limited liability company organized under AS 10.50 and all members are residents of Alaska, or is a partnership under AS 32.06, or AS 32.11 and all partners are residents of Alaska; and
- (E) If the Firm is a Joint Venture, it is composed entirely of entities that qualify under (A) - (D).

Alaska Bidder (Offeror) Preference will be scored: Rating x Number of Evaluators x Weight = Criterion Score.

Rating will be as follows:

An Alaska Offeror's preference (i.e., a Rating of 5) will be assigned to the proposal of an Offeror who certifies (by claiming the preference on page one of Part D) that they are an Alaska Bidder (Offeror) as described above.

No Alaska Offeror's preference (i.e., a Rating of 0) will be assigned to the proposal of an Offeror who does not certify (by failure to claim the preference on page one of Part D) that it qualifies as an Alaska Bidder (Offeror) as described above.

No narrative response to this criterion is required within the Offeror's Proposal.

SECTION III - PRICE

If price is not an Evaluation Criterion, weights for both Criterion #12 and #13 shall be "0". If price is an Evaluation Criterion, the sum of weights for Criterion #12 and #13 shall be at least "10", and all Offerors shall submit Price Proposals in the specified format(s).

See item #9, under Notices in Part A – RFP, regarding statutory and regulatory provisions about price competition and item #10.3, in Part B – Submittal Checklist, regarding procedure for submittal of Billing Rates and/or Price Proposals. Cost terminology is explained on page 2 of the Pre-Audit Statement (DOT&PF Form 25A257).

CAUTION: Submittal of Offeror's or Subcontractor's "standard" rate schedules or other pricing documents which are not in required format will be non-responsive if they do not allow direct comparison with other responsive proposals.

Rates and costs proposed by the Offeror selected for contract negotiations may be investigated for reasonableness and allowability in accordance with AS 36.30.400, .420 & .480, 2 AAC 12.550 and the contract cost principles in 48 CFR Part 31. Unsupported rates and costs may be disallowed or result in termination of negotiations, or contract award. All proposed rates and the negotiated contract rates will be public information.

12. Labor Billing Rates (Required Format)

12. Weight: 0

Provide a proposed total hourly Billing Rate (i.e., inclusive of Direct Cost of Direct Labor, all Indirect Costs, and Fee) only for each of the job **FUNCTIONS** listed below. Note: Some of these functions may be performed by one or more employees of the Offeror or Subcontractors; consequently, an individual might be billed under the contract at different rates appropriate to the functions performed. **Only the maximum rate paid to any individual for each listed job function** – regardless of employer (Offeror or Subcontractor) – **must be provided and will be considered for this response**. Rates for lower paid individuals or for other job functions, if any, will be addressed during contract negotiations.

- | | | |
|------------------------|---------------|--------------------------|
| 1. Contract Management | (Estimated at | % of total labor effort) |
| 2. Project Management | (Estimated at | % of total labor effort) |
| 3. | (Estimated at | % of total labor effort) |
| 4. | (Estimated at | % of total labor effort) |
| 5. | (Estimated at | % of total labor effort) |

*In accordance with the submittal Checklist ('rfp-b'), item 10.3, *Billing Rates must be signed and dated by the person who prepares it (may be different signatures for each Subcontractor)*

Response will be scored as follows: The maximum hourly rates proposed for the job functions listed above will be multiplied by the percentage of total labor effort (estimated above) and then summed to obtain an aggregate rate for each Offeror. If more than one rate is provided for any job function, only the highest rate will be used. Each Offeror's score will be calculated using the following equation – except that the **score will be zero if a rate for each listed function is not provided by an Offeror**.

$$\frac{(\text{Lowest aggregate rate from all Offerors}) \times (\text{MPP}^*)}{(\text{Offeror's aggregate rate})} = \text{Offeror's Criterion Score}$$

*MPP = Maximum Possible Points = (5) x (Number of Evaluators) x (Weight)

If no federal funding, then per AS 36.30.250(b), aggregate rates shall be reduced for the above calculation by the following applicable percentages when the rates are from Offerors that **designate preferences on page one of Part D**.

- ALASKA BIDDER (OFFEROR) PREFERENCE [2 AAC 12.260(d)]..... 5%
- ALASKA VETERAN-OWNED BUSINESS PREFERENCE [AS 36.30.175] (maximum \$5000)..... 5%
- and only ONE of the following:
- EMPLOYMENT PROGRAM PREFERENCE [AS 36.30.170(c)]..... 15%
- DISABLED SOLE PROPRIETOR OR 50% DISABLED EMPLOYEES [AS 36.30.170(e & f)] 10%

To claim employment or disabled preference, Offeror must be on the appropriate Alaska Division of Vocational Rehabilitation list at the time designated for opening (i.e., receipt) of proposals.

13. Total Price Proposal (Required Format)**13. Weight: 0**

Provide proposed costs for all labor, subcontracts, equipment, expenses, etc., and a proposed amount for Fee. Submit a separate price proposal in the following format for the Offeror and for each Subcontract (first, second, third tier, etc.) that may exceed \$25,000. Each price proposal must be signed and dated by the person who prepares it. Note that the PRICES of the next lower tier subcontracts must be listed as COSTS in Item #4 (Other Direct Costs) of the price proposal for the next higher tier contractor so that the price of all subcontracts "roll-up" into the Offeror's total price proposal.

1. Show project title, project number, and Offeror or Subcontractor Name.
2. **Direct Costs of Direct Labor (DCDL)**
Show the estimated costs for each job classification of employees proposed for the contract. List under the following headings. Names required only for key staff and/or persons in "responsible-charge" (Ref: AS 08.48). **Hourly Rates must not include Indirect Costs or Fee.**

<u>Job Classification</u>	<u>Name</u>	<u>Total Hours</u>	<u>Rate(\$/hr)</u>	<u>Proposed Costs (\$)</u>
				Total DCDL: \$ _____

3. **Indirect Costs (IDC)**
These costs include what are generally referred to as 1) Fringe Benefits and 2) Overhead (including direct and indirect costs of Indirect Labor). Show the Proposed IDC Rate as a percentage of Direct Costs of Direct Labor and the product (IDC Amount) of that Rate multiplied by the total DCDL.

IDC Rate: _____ % IDC Amount: \$ _____

4. **Other Direct Costs (ODC)**
These costs include: subcontracts, equipment (company owned or rented), and reimbursable expenses (e.g., transportation, food and lodging, reproduction) – if not included in Indirect Costs. List proposed costs under the following headings. If multiples of an item required, list the proposed quantity, unit rate, and total cost for each. **Costs must be based on actual costs to the offeror or the subcontractor, without any profit or other markup.**

<u>Item</u>	<u>Quantity</u>	<u>Cost (\$/Unit)</u>	<u>Proposed Costs (\$)</u>
			Total ODC: \$ _____

5. **Total Proposed Cost**
Sum of DCDL + IDC + ODC

Total Cost: \$ _____

6. **Proposed Fee**
List a proposed amount (Contract Fee is generally negotiated using a structured Fee analysis of proposed costs).

Proposed Fee: \$ _____

7. **Total Proposed Price**
Sum of Total Proposed Cost plus Proposed FEE.

Total Price: \$ _____

8. *In accordance with the Submittal Checklist ('rfp-b'), item 10.3, Price Proposals must be signed and dated by the person who prepares it (may be a different signature for each subcontractor).*

Response will be scored as follows:
$$\frac{(\text{Lowest Total Proposed Price}) \times (\text{MPP}^*)}{(\text{Offeror's Total Proposed Price})} = \text{Criterion Score}$$

*MPP = Maximum Possible Points = (5) x (Number of Evaluators) x (Weight)

If no federal funding, then per AS 36.30.250(b), total price shall be reduced for the above calculation by the following applicable percentages when the prices are from Offerors designate preferences on page one of Part D.

- ALASKA BIDDER (OFFEROR) PREFERENCE [2 AAC 12.260(d)] 5%
- ALASKA VETERAN-OWNED BUSINESS PREFERENCE [AS 36.30.321(f)] (maximum \$5,000) 5%
- and only ONE of the following:
- EMPLOYMENT PROGRAM PREFERENCE [AS 36.30.321(b)] 15%
- DISABLED SOLE PROPRIETOR [AS 36.30.321(d) / (k)] 10%

To claim employment or disabled preference, Offeror must be on the appropriate Alaska Division of Vocational Rehabilitation list at the time designated for opening (i.e., receipt) of proposals.

Alaska Department of Transportation & Public Facilities

PROPOSAL FORM

PART

D

THIS FORM MUST BE THE FIRST PAGE OF PROPOSAL. Attach criteria responses as explained in Part B - Submittal Checklist. No transmittal letter or cover sheet will be used.

PROJECT

Project Numbers-State/Federal : CFAPT00501 & AIP 3-02-0054-XXX-20XX
..... : CFAPT00505 & AIP 3-02-0150-XXX-20XX
Project Title : Chefnak Airport & Kipnuk Airport Rehabilitation Design Services
RFP No. : 25202046

OFFEROR (CONTRACTOR)

Contractor :
Street :
P.O. Box..... :
City, State, Zip :
Alaska Business License Number :
Federal Tax Identification No..... :
DOT&PF DBE Certification No. (if any) :
Individual(s) to sign contract..... :
Title(s)..... :
Type of business enterprise (check one)..... : ☐ Corporation in the state of...
☐ Individual ☐ Partnership ☐ Other(specify)..... :

ALASKA STATUTORY PREFERENCES (IF NO FEDERAL FUNDING)

Check the applicable preferences that you claim for the proposed contract (reference Criteria 11, 12 & 13 in Part C):
☐ Alaska Bidder (Offeror) **AND>>** ☐ Veterans **AND>>** ☐ Employment Program **or** ☐ Disabled Persons

PROPOSED SUBCONTRACTOR(S)

<u>Service, Equipment, etc.</u>	<u>Subcontractor & Office Location</u>	<u>AK Business License No.</u>	<u>DOT&PF DBE Certification No.</u>
---------------------------------	--	--------------------------------	---

CERTIFICATIONS

I certify: that I am a duly authorized representative of the Contractor; that this Submittal accurately represents capabilities of the Contractor and Subcontractors identified herein for providing the services indicated; and that the requirements of the Certifications on page 2 and 3 of this Part D for 1) Alaska Licenses/Registrations, 2) Insurance, 3) Federal-Aid Contracts exceeding \$100,000, 4) Cost and Pricing Data, 5) Trade Restrictions/Suspension/Debarment, 6) Foreign Contracting, 7) DBE Commitment, and 8) Former Public Officer – will be complied with in full. These Certifications are material representations of fact upon which reliance will be placed if the proposed contract is awarded. Failure to comply with these Certifications is a fraudulent act. The Contracting Agency is hereby authorized to request any entity identified in this proposal to furnish information deemed necessary to verify the reputation and capabilities of the Contractor and Subcontractors. This proposal is valid for at least ninety days.

Signature : _____
Name : _____ Date: _____
Title..... : _____ Telephone (voice): _____
_____ (fax): _____
_____ Email Address: _____

CERTIFICATION FOR ALASKA BUSINESS LICENSES AND REGISTRATIONS

PART

D

Contractor and all Subcontractors shall comply with the following applicable requirements of Alaska Statutes:

1. **Alaska Business License** (Form 08-070 issued under AS 43.70) at the time contract is awarded as required by AS 36.30.210(e) for Contractor and all Subcontractors. In accordance with Administrative Manual, Section 81.120, proof of application for an Alaska Business license will satisfy this requirement. Per AAM 81.120, acceptable evidence that the offeror possesses a valid Alaska business license consists of any one of the following:
 - a. Copy of the Alaska business license.
 - b. A canceled check that demonstrates payment for the Alaska business license fee.
 - c. A copy of the Alaska business license application with a receipt stamp from the State's business license office.
 - d. A sworn notarized affidavit that the bidder/offeror applied and paid for the Alaska business license.
 - e. Other forms of evidence acceptable to the Department of Law.
2. **Certificate of Registration** for each individual to be in "responsible charge" (AS 08.48.341(11-14)) for Architecture, Engineering, Land Surveying, or Landscape Architecture (Form 08-2407 issued under AS 08.48.211) issued prior to submittal of proposal. Associates, consultants, or specialists under the supervision of a registered individual in "responsible charge" are exempt from registration requirements (AS 08.48.331).
3. **Certificate of Authorization for Corporations, Limited Liability Companies, and Limited Liability Partnerships** for Contractors and Subcontractors for Architecture, Engineering, Land Surveying, or Landscape Architecture (Form 08-2407 issued under AS 08.48.241). Entities offering to provide Architectural, Engineering or Land Surveying services do not need to be registered for such disciplines at the time proposal is submitted provided they obtain registration prior to contract award (AS 08.48.241).
4. **Certificate of Incorporation** (Alaska firms) or **Certificate of Authorization for Foreign Firm** ("Out-of-State" firms). All corporations, regardless of type of services provided, must have one of the certificates (AS 10.06.218 and other sections of Title 10.06 - Alaska Corporations Code).
5. **Current Board of Director's Resolution** for incorporated Contractors and incorporated Subcontractors for Architecture, Engineering, Land Surveying or Landscape Architecture (reference AS 08.48.241) that names the person(s) designated in "responsible charge" for each discipline. Such persons shall be licensed in Alaska and shall participate as project staff in the Contract/Subcontracts.
6. **All partners** in a Partnership to provide Architectural, Engineering, Land Surveying, or Landscape Architecture **must be legally registered in Alaska** prior to submittal of proposal for at least one of those disciplines (AS 08.48.251) which the Partnership offers.
7. **Joint Ventures**, regardless of type of services provided, must be licensed/registered in the legal name of the Joint Venture as used in this proposal (AS 43.70.020 and 43.70.110(4)).
8. **Contracts for Architecture, Engineering, Land Surveying, or Landscape Architecture** may not be awarded to individuals, corporations or partnerships not in compliance, respectively, with the provisions of paragraph 2, 3, and 6, above (AS 36.90.100).

For information about licensing, Offerors may contact the Alaska Department of Commerce, Community, and Economic Development, Division of Corporations, Business and Professional Licensing at P.O. Box 110806, Juneau, AK 99811-0806, or at Telephone (907) 465-2550, or at Internet address: <https://www.commerce.alaska.gov/web/cbpl>

CERTIFICATION FOR INSURANCE

Contractor will ensure that it and all Subcontractors have insurance coverage to effectuate the requirements of DOT&PF Form 25A269, Indemnification and Insurance.

CERTIFICATION FOR FEDERAL-AID CONTRACTS EXCEEDING \$100,000

The individual signing this proposal certifies to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, Disclosure of Lobbying Activities, in accordance with its instructions. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

This certification is a material representation of fact upon which reliance will be placed if the proposed contract is awarded. Submission of this certification is a prerequisite for making or entering into the proposed contract imposed by Section 1352, Title 31, U.S. Code. The Contractor also agrees by submitting this proposal that Contractor shall require that the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such Subcontractors shall certify and disclose accordingly.

CERTIFICATION – COST AND PRICING DATA

In accordance with AS 36.30.400, any cost and pricing data submitted herewith, or in any future price proposals for the proposed contract, will be accurate, complete and current as of the date submitted and will continue to be accurate and complete during the performance of the contract, if awarded.

The Contractor certifies that all costs submitted in a current or future price proposal are allowable in accordance with the cost principles of the Federal Acquisition Regulations of Title 48, Code of Federal Regulations (CFR), Part 31 and that the price proposal does not include any costs which are expressly unallowable under the cost principles of the FAR of 48 CFR 31. In addition, all known material transactions or events that have occurred affecting the firm's ownership, organization and indirect costs rates have been disclosed.

CERTIFICATION – TRADE RESTRICTIONS AND SUSPENSION AND DEBARMENT

The individual signing this proposal certifies to the best of his or her knowledge that the Contractor and any subcontractors are in compliance with DOT&PF 25A262 Appendix A, General Conditions, Article A25 and Article A26.

CERTIFICATION - FOREIGN CONTRACTING

By signature on this solicitation, the offeror certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States. If the offeror cannot certify that all work is being performed in the United States, the offeror must contact the Contracts Officer to request a waiver at least 10 days prior to proposal deadline. The offeror must provide with their submission a detailed description of the portion of work being performed outside the United States, where, by whom, and the reason the waiver is necessary. Failure to comply with this requirement may cause the state to reject the bid or proposal as non-responsive, or cancel the contract.

CERTIFICATION – DBE COMMITMENT

For federal-aid projects with DBE goals: if the Contractor submits a utilization report that proposes to use certified DBE's in the performance of work, the Contractor certifies that every effort will be made to meet or exceed the proposed percentage.

In addition, the Contractor certifies that a Consultant Registration form shall be submitted to the DBE/Civil Rights Office for their firm and each subconsultant prior to award.

CERTIFICATION – FORMER PUBLIC OFFICER

Any proposer listing as a member of the proposer's team a current public officer or a former public officer who has left state service within the past two years must submit a sworn statement from that individual that the Alaska Executive Branch Ethics Act does not prohibit his or her participation in this project. If a proposer fails to submit a required statement, the proposal may be deemed nonresponsive or nonresponsible, and rejected, depending upon the materiality of the individual's proposed position.

The Ethics Act bars a public officer who leaves State service from representing, advising or assisting a person for compensation regarding a matter –

that was under consideration by the administrative unit in which the officer served, and in which the officer participated personally and substantially through the exercise of official action,

for two years after leaving state service. See AS 39.52.180(a). "Public officer" includes a state employee, a member of a state board and commission, and a trustee of the Exxon Valdez Oil Spill Trust. "Official action" means a recommendation, decision, approval, disapproval, vote, or other similar action or inaction. Possible remedies for violating the bar include penalties against the former public officer and voiding the state grant, contract or lease in which the former public officer is involved.

Additionally, former public officers may not disclose or use information acquired in the course of their official duties that could in any way result in a benefit to the former public officers or their families, if the information has not been disseminated to the public or is confidential by law, without appropriate authorization. See AS 39.52.140.

Each current or former public officer is responsible for determining whether he or she may serve in the listed capacity on this project without violating the Ethics Act. A form that a former public officer may use to certify their eligibility is attached. Current public officers may seek advice from their designated ethics supervisors concerning the scope and application of the Ethics Act. Former public officers may, in writing, request advice from the Office of the Attorney General, Ethics Attorney concerning the application of the Ethics Act to their participation in this project. It is the responsibility of the individual and the proposer to seek resolution in a timely manner of any question concerning the individual's eligibility.

PRE-AUDIT STATEMENT

(Confidential when completed)

Submit this form, completed and with required attachments, **only** if specifically requested, and **only** to the following address: DOT&PF, Attn: Office of Internal Review, PO Box 196900, Anchorage, AK 99519-6900 OR to fax number: (907) 269-0733. Confidentiality may not be ensured if delivered otherwise.

Evaluation of this statement may preclude the necessity for a comprehensive on-site audit of Contractor's records. Entries may be handwritten, if legible.

1. Identify your financial year including beginning and ending dates.....:
2. List your actual costs, by the following categories, for your most recently ended fiscal year. Cost Terminology is defined on the reverse.
 - 2a. Direct Labor..... \$
 - 2b. Attach a Trial Balance with grouping of accounts used to arrive at the following Indirect Cost amounts:
Fringe Benefits\$
General & Administrative Expenses.....\$

Sum..... \$
 - 2c. Indirect Cost Rate (Sum of 2b / 2a)..... Percent (%):
3. If your records have been audited within the last two years by a government agency, attach a copy of the Audit Report.
4. Attach copies of your most recent Internal and Audited (if performed by other than the Contracting Agency) Financial Statements.
5. Are your accounting methods for recording contract costs based on a job or project identified cost system?
[] Yes [] No If your response is "No", attach an explanation of your project cost accounting system.
6. If you charge projects based on unit rates (e.g.: for computer time, laboratory tests, copies or equipment use, etc.) attach a list of such items and unit rates.
7. Do you offset revenue received from unit rate payments against the applicable Indirect Cost Accounts?
[] Yes [] No

If you have questions concerning this document, please telephone our Auditors at (907) 269-0715.

CERTIFICATION

I certify that I am a duly authorized representative of the Contractor and that information and materials enclosed within this statement accurately represent financial records of the office listed below.

Signature: _____	Date: _____
Name: _____	Telephone: _____
Title: _____	Fax: _____
Contractor: _____	Email: _____

Office Address for which this Submittal is made:

Street:
P.O. Box:
City, State, Zip:

Address where Accounting Records are maintained,
if not at Office Address:

:
:
:

COST TERMINOLOGY

DIRECT LABOR - Base salary or wages paid to employees charged directly to contracts or projects.

OTHER DIRECT COSTS - Actual costs of other than Direct Labor. Some examples of Other Direct Costs are subcontracts, equipment (company owned or rented), unit rate items and reimbursable expenses (travel, computer charges, reproduction, etc.).

INDIRECT COST RATE – A computed rate developed by adding all of a firm's general and administrative costs, and all other indirect costs, then dividing by a base value, usually direct labor dollars to get a percentage. This rate is normally compiled based on the consultant's applicable fiscal year.

INDIRECT COSTS - Indirect costs consist of allowable expenses which, because of their incurrence for common or joint cost objectives, must be prorated (allocated) to jobs or contracts using a specified Indirect Cost Rate. A cost objective is a function, organizational subdivision, contract, project or work unit for which cost data is accumulated under the Contractor's accounting system. Generally, Indirect Costs are segregated into the following categories: Fringe Benefits and General & Administrative Expenses .

Fringe Benefits - Costs for items such as:

Workers' Compensation Insurance
Deferred Compensation/Retirement Plans

Vacation Time and Authorized Leave
Social Security and Unemployment Taxes
Group Medical Plan and Life Insurance Premiums

Overhead costs for items such as the following, if they are not included in Direct Costs:

Indirect Labor (Supervisory, Administrative, etc.)
Travel, Food and Lodging
Maintenance and Depreciation of Equipment/Computers
Business Insurance Premiums Not Billed to Clients
Rent, Heat, Power, Light and Janitorial Services

Office Supplies
Communications
Reproduction Costs
Recruiting Expense
Rentals of Equipment/Computers

UN-ALLOWABLE COSTS - Costs for the following items and certain other costs defined in 48 CFR Part 31 and related regulations are not allowable. Such costs shall not be included as Indirect Costs or in the calculation of the Indirect Cost Rate.

Alcoholic Beverages
Advertising
Interest and Other Financial Costs
Contributions and Donations
Federal Income Taxes
Goodwill

Organization Costs
Lobbying Costs
Bad Debts
Fines and Penalties
Entertainment
Keyman Insurance

NOTE: IF YOUR ACCOUNTING SYSTEM WHOLLY OR PARTIALLY ALLOCATES INDIRECT COSTS ON OTHER THAN A DIRECT LABOR BASIS, ATTACH A DESCRIPTION OF THE COST POOLS OR SERVICE CENTERS YOU USE AND IDENTIFY THE INDIRECT COSTS RATE(S) AND BASE(S).

INDEMNIFICATION AND INSURANCE

Appendix D in Professional Services Agreements

IRIS Program No:	CFAPT00501 CFAPT00505
Federal Project No:	AIP 3-02-0054- XXX-20XX AIP 3-02-0150- XXX-20XX
Date Prepared:	12/5/2019

CONTRACTOR shall include the provisions of this form in all subcontracts that exceed \$25,000 and shall ensure Subcontractor's compliance with such provisions.

ARTICLE D1 INDEMNIFICATION

D1.1 The CONTRACTOR shall indemnify, hold harmless, and defend the CONTRACTING AGENCY from and against any claim of, or liability for negligent acts, errors or omissions of the CONTRACTOR under this Agreement. The CONTRACTOR shall not be required to indemnify the CONTRACTING AGENCY for a claim of, or liability for, the independent negligence of the CONTRACTING AGENCY. If there is a claim of, or liability for, the joint negligent error or omission of the CONTRACTOR and the independent negligence of the CONTRACTING AGENCY, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "CONTRACTOR" and "CONTRACTING AGENCY", as used within this article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "Independent Negligence" is negligence other than in the CONTRACTING AGENCY's selection, administration, monitoring, or controlling of the CONTRACTOR and in approving or accepting the CONTRACTOR's Work.

D1.2 The CONTRACTOR shall exercise that degree of skill, care and judgment commensurate with the professional standards for the services of a similar nature. When such standards are in dispute, they shall be established by a panel of three qualified, impartial professionals objectively selected and appointed by the Appeals Officer.

D1.3 The CONTRACTOR shall correct, through re-performance at its expense, any services which are deficient or defective because of the CONTRACTOR's failure to perform said services in accordance with professional standards, provided the CONTRACTING AGENCY has notified the CONTRACTOR in writing within a reasonable time, not to exceed 60 days, of the discovery of any such deficiency during the performance of the services and within 12 months of the date of final payment under this Agreement.

ARTICLE D2 INSURANCE

D2.1 Without limiting the CONTRACTOR's indemnification, it is agreed that CONTRACTOR shall purchase at its own expense and maintain in force at all

times for the duration of this Agreement, plus one year following the date of final payment, the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the CONTRACTOR's policy contains higher limits, the CONTRACTING AGENCY shall be entitled to coverage to the extent of such higher limits. Certificates of insurance must be furnished to the CONTRACTING AGENCY and incorporated into this Agreement with copies attached to this document. Certificates must provide for the CONTRACTING AGENCY to receive notice of any policy cancellation or reduction per AS 21.36 Sections 210-310. Failure to furnish certificates of insurance or lapse of the policy is a material breach and grounds for termination of the CONTRACTOR's services and may preclude other Agreements between the CONTRACTOR and the CONTRACTING AGENCY.

D2.1.1 Worker's Compensation Insurance: The CONTRACTOR shall provide and maintain, for all employees engaged in work under this Agreement, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal USL&H and Jones Act requirements. The policy(s) must waive subrogation against the State of Alaska.

D2.1.2 Commercial General Liability Insurance: Such policy shall have **minimum** coverage limits of \$300,000 combined single limit per occurrence, covering all business premises and operations used by the Contractor in the performance of services under this agreement. The policy shall be written on an "occurrence" form and shall not be written as a "claims-made" form unless specifically reviewed and agreed to by the CONTRACTING AGENCY.

D2.1.3 Comprehensive Automobile Liability Insurance: Such policy shall have **minimum** coverage of \$300,000 combined single limit per occurrence covering all vehicles used by the Contractor in the performance of services under this agreement.

D2.1.4 Professional Liability (E&O) Insurance: Covering all negligent errors or omissions, and negligent acts, which the CONTRACTOR, Subcontractor or anyone directly or indirectly employed by them, make in the performance of this Agreement which result in financial loss to the State of Alaska. Limits required are per the following schedule:

MINIMUM LIMITS OF E&O INSURANCE

Contract Amount	Combined Single Limit, Per Occurrence & Annual Aggregate
Under \$25,000	As Available
\$25,000 to \$100,000	\$300,000
\$100,000 to \$499,999	\$500,000
\$500,000 to \$999,000	\$1,000,000
\$1,000,000 and over	Negotiable

D2.1.5 Professional Liability Insurance required for this Agreement is \$1,000,000

ARTICLE D3**MODIFICATION OF INSURANCE REQUIREMENTS**

(Article D3 is completed only when some of the standard insurance coverages are not applicable.)

CONTRACTOR RELATED MODIFICATIONS

- D3.1 ☐ **Workers Compensation Insurance** is not required because the CONTRACTOR is an Independent Contractor, Sole Proprietor or Self-Employed Person having no employees in any sense of AS 23.30.045.
- D3.2 ☐ **Comprehensive or Commercial General Liability Insurance** is not required because the general public and clients do not have any business access to a place of business or home office maintained by the CONTRACTOR.
- D3.3 ☐ **Comprehensive Automobile Liability Insurance** is not required because only public transportation, or a rented passenger vehicle with business use insurance, will be used to accomplish requirements of this Agreement.

PROJECT RELATED MODIFICATIONS FOR E&O COVERAGE

When services may apply to fire, life safety or structural aspects and/or wherever the services should safeguard life, limb, health or property, Professional Liability Insurance shall be required.

(E&O Coverage may be waived only if it was specifically not required within the solicitation for proposals.)

- D3.4 ☐ **Professional Liability (E&O) Insurance** is not required because: 1) the CONTRACTING AGENCY's use of the services or Work products obtained from the CONTRACTOR will not result in significant exposure to any third party claims for loss or damage; and 2), the CONTRACTOR services will not apply to any construction, alteration, demolition, repair or direct use of any highway, airport, harbor, building or other structure.
- D3.5 ☐ **Professional Liability (E&O) Insurance** is not required because this Agreement is for one of the following applicable (*checked*) services for which E&O coverage is not needed:
- ☐ Right-of-Way Fee Appraisals
 - ☐ Photogrammetric Mapping Services
 - ☐ Architectural/Engineering review of Construction Bid Documents wherein design responsibility clearly remains with the designer of record.

OTHER BASIS FOR MODIFICATIONS

(Requires written concurrence from Division of Risk Management)

- D3.6 ☐ Attached Exhibit D-1 identifies and provides justification for insurance modifications.

Above *checked* modifications of the insurance requirements specified in Article D2 are hereby approved:

CONTRACTING OFFICER

Signature: _____ Date: _____
 Name: _____
 Title: _____

PROPOSED STATEMENT OF SERVICES APPENDIX B

IRIS Program No:	CFAPT00501 CFAPT00505 AIP 3-02-0054- XXX-20XX
Federal Project No:	AIP 3-02-0150- XXX-20XX
Date Prepared:	12/5/2019

Chefornak Airport and Kipnuk Airport Rehabilitation Design Services RFP No. 25202046

ARTICLE B1 **INDEX AND DEFINITIONS**

B1.1 Index of Articles

<u>Article</u>	<u>Task #</u>	<u>Subject</u>
B1		Definitions
B2		Exhibits
B3		Codes, Regulations, Standards, and Procedures
B4		Administrative Requirements
B5		Management
B6		Project Location and Description
B7		Summary of Contract Services
B8		General Criteria for Survey and Mapping Services
B9	1	Survey and Mapping Services
B10	2	Environmental Activities
B11		Design Engineering
B11.10	3	Engineer's Design Report (EDR)
B11.11	4	Construction Safety and Phasing Plan (CSPP)
B11.13.1	5	Plans in Hand
B11.12	6	Erosion and Sediment Control Plan (ESCP)
B11.13.2	7	Plans, Specifications, and Estimate (PS&E)
B11.13.3	8	Final PS&E
B12	9	Airport Layout Plan (ALP)
B13	10	Assistance During Bidding
B14	11	Assistance During Construction
B15	NIC	Utility Agreements

(NIC) is abbreviation for (Not in Contract)

The Contracting Agency reserves the right to add these articles by amendment. However, the Contracting Agency is under no obligation to do so and reserve the right to complete the services by any other means, including the use of in-house forces.

B1.2 Definitions

DOT&PF	Alaska Department of Transportation and Public Facilities
Functional Groups	DOT&PF Design support sections (Environmental, Right-of-Way, Utilities, etc.)
Project Manager	DOT&PF Contract Manager
Contracting Agency	DOT&PF Project Management Team
Contractor	Design Contractor
CFK	Chefornak Airport
LLK	Kipnuk Airport

ARTICLE B2 **EXHIBITS**

- Exhibit B-1 Project Location & Vicinity Maps
Exhibit B-2 Project Schedule

ARTICLE B3 **CODES, REGULATIONS, STANDARDS AND PROCEDURES**

B3.1 General

Perform all studies, reports, and design services in accordance with applicable codes, regulations and standards; professional practice procedures; and commonly recognized construction methods. Consider the geographical location of the project as well as other environmental and site specific constraints when performing services for this project.

B3.2 Standards and Guidelines

Publications that contain the current aviation design standards and guidelines are referenced throughout this Statement of Services. During the period of this agreement these documents may be supplemented, deleted, or revised.

B3.3 Units of Measurement

Use U.S. Customary units of measurement throughout development of the project.

ARTICLE B4 **ADMINISTRATIVE REQUIREMENTS**

B4.1 General

This contract is divided into several tasks. Provide services as identified and authorized by sequentially numbered Notices-to-Proceed (NTP). Do not perform services or incur billable expense except as authorized by an NTP. There is no guarantee that all tasks will be accomplished. The contract may terminate at any stage found to be in the Contracting Agency's best interests.

B4.2 Duplicate Requirements

In combining all the tasks into one contract, duplicate requirements may be encountered during project development in regards to reports, drawings, activities, etc. No duplication is intended. Coordinate all work items internally and with the Contracting Agency to maximize the results from work efforts and eliminate any perceived duplication.

B4.3 Project Staff

All services must be performed by or under the direct supervision of the individuals listed below. Replace, add, or change Project Staff named below only with prior Contracting Agency written approval.

Name

Project Responsibilities

Contract Management
Project Management
Civil Engineering
Electrical Engineering
Land Surveying/Mapping
Environmental Documentation/Permitting

B4.4 Professional Registration

Prepare all reports, plans, specifications, estimates and similar work products by or under the supervision of an Engineer currently registered in Alaska.

B4.5 Billing Reports

Submit billings before the 15th of each month. Provide a two-page (typical) report with each monthly billing for months in which services are performed in a format the Contracting Agency approves. Specifically describe the work completed, problems encountered, and the focus of the effort ahead for prime and sub consultants. For each task, list the dollars expended to date, the remaining dollars needed to complete it, and the estimated percent complete. Include supporting documentation such as receipts for reimbursable expenses and a summary of labor charges with all costs clearly identified. Clearly explain in the report any delayed costs from previous billing periods that are included in the current billing.

B4.6 Correspondence

Include the project name and numbers (State & Federal) on all correspondence pertaining to the project. Provide copies of all outgoing correspondence and originals of all incoming correspondence to the Contracting Agency at least once a week.

B4.7 Documents and Reports

Prepare documents with solid black letters and double-spaced lines on white, 8.5 inch x 11-inch bond paper. Other size paper may be used for illustrations if they are folded to 8.5 inch x 11-inch size. Print original documents and reports on one side of the paper only. Do not use photographs or multicolored graphics except as specifically approved by the Contracting Agency. Deliver original, camera-ready copies of final documents and reports to the Contracting Agency for a check before printing. Use “active voice” verb forms when writing documents and reports where feasible.

In addition to the hard copy deliverables, submit all final documents and reports in digital form as pdf files and as document files for current version of Microsoft Word (or appropriate Microsoft Office product).

B4.7.1 Reproduction and Distribution. When the contract requires only the original or only one copy of a work product to be delivered, the Contracting Agency will reproduce and distribute any other copies required. Deliver items for reproduction single-sided, organized, and camera ready for copying and not stapled or otherwise bound. The Contracting Agency will be responsible for the distribution of all draft and final reports produced under this contract.

B4.7.2 Paper Copies. When the contract calls for more than one copy of documents or reports, print copies on both sides of the paper. However, print the cover and pages with approved illustrations, multicolored graphics, photographs, or estimates on one side of the page only. Comb-bind all copies; do not bind originals. For reviews, bind copies of estimates as the first item behind the cover of the specifications.

B4.7.3 Digital Copies. The Contracting Agency uses Microsoft Windows, Microsoft Office Suite (Word, Excel, et al.) and AutoCAD Civil 3D 2019 software. Submit all digital files in formats fully compatible with the Contracting Agency's software. Provide formal submittals on CD-R(W) or as approved by the Project Manager. Provide informal digital submittals as approved by the Project Manager, usually as e-mail attachments.

B4.7.4 Page Numbers. Number pages in all documents to allow every major Section, Chapter, Appendix, etc., to begin on a "right hand," odd numbered page.

B4.7.5 Covers. Include the following on the cover of all documents and reports:

- A. Name of document or report
- B. Date
- C. Indicate whether draft or final
- D. Project Name
- E. State and Federal Project Number(s)
- F. Prepared for: Alaska Department of Transportation and Public Facilities
- G. Prepared by:
- H. Map and/or picture of project area

B4.8 Plans, Maps, and Plats

Submit with solid black ink on 11 x 17-inch bond paper. Submit final drawings on 11 x 17-inch bond paper and in .pdf format.

B4.8.1 Drafting. Submit all drawings as AutoCAD Civil 3D 2019 (or version most recently adopted by the Contracting Agency) drawing files and plot files. Submit draft and final drawing and plot files on CD ROM disks. The Contracting Agency will provide a standard layering scheme and plot files for Contractor use. Use drafting procedures outlined in the current Central Region Aviation Design Drafting Manual.

B4.8.2 Contractor Name on Plan Sheets and Documents. No Contractor logos are allowed on any electronic or hard-copy document produced for the Contracting Agency. Include the Contractor's company name in the box above or below the Engineer's seal on each plan sheet. Include the company name only at the bottom right of the first page, cover sheet, or title sheet of other documents produced for the Contracting Agency. Contractor letterhead is allowed only in exhibits in document appendices. Include Contractor name in the same font as other non-emphasized lettering on the plan sheet or document. Do not exceed 1/16" in height on 11"X17" plan sheets, and follow the format:

PLANS DEVELOPED BY:
COMPANY NAME
ADDRESS
TELEPHONE NO.
CERTIFICATION OF AUTHORIZATION NO.

B4.9 Specifications and Estimates

Submit with solid black letters that are single spaced on white, 8.5 x 11-inch bond paper. Print only on one side of the paper. Do not include graphics or photographs except as the Contracting Agency specifically approves. Also submit all specifications in both .pdf and Microsoft Word format.

B4.9.1 Estimate Format. Develop the cost estimate for this project using the AASHTOWare® Program. Access will be provided to the program and instructional documentation for the software will be available.

B4.10 Proofreading

Prepare reports and specifications, to the greatest extent possible, free of mathematical, grammar, spelling and typographical errors. The Contractor is responsible for professional proofreading of the documents to meet the intent of this requirement. All errors and omissions in deliverables will be corrected at the Contractor's expense.

B4.10.1 Quality Assurance Memo. Provide with each submittal a Quality Assurance memo signed by the person in responsible charge for the project, certifying that he/she has performed a quality control check on the items included in the submittal. A memo template will be provided by the Contracting Agency.

B4.11 Revisions

Modify work products in response to Contracting Agency direction. Consider corrections, adjustments, or modifications indicated during the review/approval process, but which do not substantially affect the scope, complexity, or character of the services, a normal part of Contractor services.

B4.11.1 Errors and Omissions. Except as described in this Statement of Services, submit complete work products. The Contracting Agency will not accept work products having significant errors or omissions until they are corrected.

B4.11.2 Review Meetings. See B11.14.

B4.11.3 Comment Resolution. Provide with subsequent submittals a technical memo that clearly documents and explains all comments and changes from previous submittal.

B.4.12 Completion Documentation

Submit the originals of all documents prepared during project development, including those generated under all reviews, with the Final PS&E package. These documents include all notes, sketches, maps, photographs, survey data, computations (include cost computations under separate cover), cross sections, digital terrain model, electronic files, and other materials that were created to develop, record, or justify services provided for the project. Identify all assumptions made. Keep a copy of all the documents until construction is complete.

B4.12.1 Source Document Reference. Include sufficient information in documents created to determine pay item quantities to allow the quantity for each pay item to be checked by starting from the source document. Reference these documents to the applicable pay item.

B4.12.2 Submittal Format. Submit completion documents in loose-leaf, three ring binders. Label them on the spine with the project name, "Completion Documents", and the binder number. Label the front of the binders with this information as well as the State and Federal project numbers and a brief description of what documents are contained in the binder. Provide dividers that sort the documents by pay item number, report, or other logical category. Number the binders sequentially and include a table of contents in the first one.

B4.13 Conflict of Interest

The Contractor shall not represent any parties other than the Contracting Agency concerning this project.

ARTICLE B5 **MANAGEMENT**

Note: This Article shall not be treated as a distinct task. Costs associated with the services described in this Article shall be apportioned among the tasks required to accomplish the requirements of Articles B7 through B15.

B5.1 Performance Schedule

Perform work in accordance with the project schedule in **Exhibit B-2**.

B5.1.1 Timely Information. Provide timely information to the Contracting Agency for project-related services performed by Contracting Agency functional groups.

B5.1.2 Schedule changes. Expend every effort necessary to stay on schedule and to meet the contract delivery dates. Any schedule changes must be approved by the Project Manager.

B5.1.3 Progress Meetings/Reports. Attend progress meetings (typically every month for about an hour) with the Contracting Agency to review progress reports, invoices, and schedule. The Contractor is responsible to:

- Provide "exception reporting" of scheduled activities that are late, suspended, or significantly accelerated.
- Explain why any activity is off schedule, or likely to become so.
- Explain what corrective action(s) are being taken.
- Discuss approaching events and milestones to be achieved over the next month at the meetings.
- Keep minutes of all meetings and submit them to the Contracting Agency within five working days.

Attendance at the meetings will be limited to:

Contracting Agency Project Management staff and invited guests
Contractor project engineer/manager
Appropriate sub-consultants

B5.2 Project Coordination within DOT&PF

The Project Manager will coordinate any required services or activities of various functional groups. Do not initiate communication with the functional groups without the prior knowledge and consent of the Project Manager. Keep the Project Manager apprised of the nature of all such communications and provide the Contracting Agency with copies of telephone records and meeting minutes. In the event any major issues or problems surface, consult the Project Manager for resolution. Provide timely responses to requests for information by the functional groups as identified within task descriptions.

B5.2.1 Federal Aviation Administration (FAA) Communication. Communications with the FAA regarding this project will be handled solely by the Contracting Agency.

B5.2.2 Contracting Agency and Public Coordination. Assist in coordinating with appropriate federal, state, and local government agencies, and the public, including special interest groups and organizations that potentially could be affected by the proposed project. Make no commitments on behalf of the Contracting Agency; any commitments for action or mitigation will be made by the Contracting Agency.

B5.2.3 Agency Meetings/Release of Information. Notify the Project Manager of all meetings with agencies, organizations, or individuals at least three working days in advance. Prior to such meetings, discuss the agenda for the meetings with the Project Manager to ensure that no inappropriate or incorrect information is disclosed. Do not release data collected under this agreement to any agency or to the public without prior approval. Document all meetings and telephone conversations concerning the proposed project. Forward original signed documents to the Project Manager.

B5.2.4 Scoping Submit all written material used to collect data for this project to the Contracting Agency for review and acceptance prior to its use or distribution.

B5.3 Right-of-Entry Permits

The Contracting Agency will obtain Right-of-Entry authorizations when required unless otherwise noted under other tasks. Provide a minimum of 30 calendar days advance notice for the Contracting Agency to acquire any authorization. Should the authorizations take additional time to obtain, performance schedule(s) may be adjusted accordingly. Contractor is not entitled to any additional compensation for any delay incurred in obtaining Right-of-Entry Permits.

ARTICLE B6 **PROJECT LOCATION AND DESCRIPTION**

B 6.1 General

The communities of Chefnak and Kipnuk are located in southwest Alaska on the Kinia and Kugkaktlik rivers, respectively. They are in the Bethel Census Area, and are approximately 480 miles west of Anchorage. These two airports are located approximately 17.5 miles apart. The Chefnak Airport (CFK) and Kipnuk Airport (LLK) are the primary means of transportation to and from, these isolated villages for the local population.

The project includes work on two separate airports that are in close proximity to one-another: 1) Chefnak Airport: resurface runway 16/34, the taxiway, apron, and access road and 2) Kipnuk Airport: resurface runway 17/35, the taxiway, and apron. The existing surface courses have subsidence, dips, cracking, and ponding. The lighting systems are at the end of their useful lives and have been damaged from the surface conditions. The Kipnuk Airport runway and safety areas are being expanded to A-II standards to meet the standards for the critical aircraft

See **Exhibit B-1**, Project Location Maps.

ARTICLE B7
SUMMARY OF CONTRACT SERVICES

B7.1 General

Provide professional services as follows:

1. Prepare Plans, Specifications, and Estimate (PS&E) documents, as needed to support the project. This effort includes design services for bid-ready construction documents. It also includes preparation of supporting documents including, but not limited to the EDR, CSPP, and ESCP.
2. Surveying and mapping.
3. Environmental Services, including the complete preparation of environmental documentation and all permits.
4. Prepare an Airport Layout Plan (ALP) reflecting the effects of this project on the airport.
5. Assistance during bidding to respond to clarification requests by contractors.
6. Assistance during construction to confirm that contractor submittals conform to the contract requirements and to adapt the contract as needed to unforeseen conditions.

The Contracting Agency reserves the right to negotiate and add Geotechnical Services, Hydraulic and Hydrologic Design, and Utility Agreements by Amendment; however, they are under no obligation to do so, and reserve the right to complete the services by any other means, including the use of in-house forces.

The schedule of project milestones appearing in **Exhibit B-2** applies to this contract.

B7.2 Contract does not guarantee amount of design services

The Contracting Agency does not guarantee that the Contractor will be required to provide all of the services detailed in this Statement of Services nor that the Contractor will incur all of the costs estimated in Appendix C. The Contractor may be asked to perform other services by amendment for the project beyond those defined in this contract.

B7.3 Deliverable Items.

The following is a breakdown of the Contract deliverable documents by Task number and associated Task Group:

Task Number	Section	Group A	Group B
Task 1 - Surveying and Mapping Services	B9	X	
Task 2 – Environmental Activities	B10	X	
Task 3 - EDR	B11.10	X	
Task 4 - CSPP	B11.11	X	
Task 5 - PIH	B11.13.1	X	
Task 6 - ESCP	B11.12	X	
Task 7 - PS&E	B11.13.2	X	
Task 8 - Final PS&E	B11.13.3	X	
Task 9 - Airport Layout Plan	B12	X	
Task 10 - Assistance During Bidding	B13	X	
Task 11 - Assistance During Construction	B14		X

ARTICLE B8

GENERAL CRITERIA FOR SURVEYING AND MAPPING SERVICES

B8.1 Standards.

The Contractor shall perform the services to standards called for in the Alaska State Professional Land Surveyors (ASPLS) Standards of Practice, the California Geodetic Control Committee (CGCC) Standards for Band IV surveys, U.S. COE Manual EM-1110-1-10000 for Photogrammetric Mapping, or the DOT&PF Construction Surveying Requirements, as appropriate to the services being performed.

All studies, reports and services shall be performed in accordance with applicable codes, regulations and standards; professional practice procedures; and commonly recognized surveying and mapping methods. The contractor shall package the deliverable in an electronic format using folders. The Contractor shall not begin surveying for design, surveying for right-of way, or right-of-way mapping without specific written authorization from the Contracting Agency.

B8.2 Considerations.

The Contractor shall consider the geographical location of the project as well as other environmental and site specific constraints when performing services. The Contractor shall procure the necessary right of entry permissions when required, including private property, any Native Allotments, and Alaska Railroad property.

B8.3 Registration.

All survey services shall be conducted by, or under, the direct supervision of a Professional Land Surveyor (PLS) holding current registration in the State of Alaska. A PLS shall be an active, on-site field supervisor of the survey crew. A PLS shall also be directly involved in the preparation of all survey deliverables.

B8.4 Field books.

The Contractor shall furnish hardbound field books for recording survey information. The books shall become the property of the Contracting Agency after the survey information has been entered and the contract completed. Each book shall be labeled with the project name and an appropriate title; e.g., Horizontal Control, Vertical Control, and shall have an index and comments page. The index page shall reference the contents by page number. A readable PDF copy of the field books is acceptable.

B8.4.1 Field notes shall be kept in a neat and orderly fashion. All pages shall be consecutively numbered, showing date, weather, and crew names. All abbreviations used shall be described on the comments page. Sketches are to be used frequently and shall be detailed enough to assist in following the progression of the services. Notes and sketches shall be adequately detailed to convey their intent to a person who is not familiar with the project. Descriptions of all monuments or other points, recovered or set, are to include the data stamped on the monument and the condition of the monument.

B8.5 Units.

U.S. Customary System of Measurement (foot units) shall be used throughout development of the project. Any metric conversions required shall be based upon the U.S. Survey Foot (3937 feet = 1200 meters exact).

B8.6 Drawings, Plats, and Maps.

Drawings, Plats, and Maps shall be prepared in electronic format as specified by the Contracting Agency.

B8.6.1 Unless otherwise stated, the format and standards for all drawings will be according to the most current DOT&PF Central Region Aviation Design Drafting Manual. These standards are available upon request. The plotted scale shall be as specified by the Contracting Agency.

B8.6.2 Drawings shall be produced and provided in English (U.S. Survey foot units) format. Distances will be shown in horizontal ground foot units. Areas shall be annotated with "Ac." for acres, and "sq. ft." for square feet. Metric units shall not be shown on drawings developed for design work, unless requested to do so by the Contracting Agency.

B8.6.3 All line work and lettering must be of professional quality and all line widths and lettering sizes must be of such size that all information can be clearly shown without overlap or confusion. All lettering must be a minimum size of 0.1 inch at a full-scale plot. Lettering and line work must be in the appropriate black drafting ink. AutoCAD style names and fonts shall follow the Contracting Agency's specified standards. See the current Design Drafting Manual (B8.6.1)

B8.6.4 Line work shall not run through text. Do not break lines at text; mask the line work using color 155 solids. Solids shall be placed on the same layer as the text that the solid lies under.

B8.6.5 Drawings are to be accurate models of the data shown, e.g.; a line labeled N 10°00'00" E 104.35' shall be electronically drawn exactly as labeled, a line that is shown to terminate at a monument symbol shall be electronically drawn with no distance between the endpoint of the line and the center of the symbol, etc.

B8.6.6 All CAD work within Model Space shall be color by layer. The drawing shall include metadata, to include: control statements, drawing notes, and any other survey related info shown as text within Model space. The drawing shall be purged before submitting. Zoom to extents and remove any extraneous features. Check to ensure that all symbols are the same scale, which should be the plotted scale of the drawing. A standard DOT&PF north arrow, a legend depicting only the symbols and line work used on that sheet, a foot unit bar scale, and standard DOT&PF border will be included on each sheet within the drawing. Do not include any extraneous backup files.

B8.6.7 Final Plans, Maps, and Plats shall be submitted electronically and with solid black ink on 22" x 34" original Mylar. All final drawings shall be plotted so that the ink is on the front surface of the Mylar. Topographic drawings are not required to be plotted.

B8.6.8 Drawings not meeting these standards will be rejected. All drawing files shall be submitted electronically to the AK DOT&PF Survey Manager upon completion for review. The contractor shall perform their own internal review of these products before delivery, to see that Department standards have been followed.

B8.7 TINs

TINs shall be an Autodesk Civil3D Surface or 3D lines with an accompanying LandXML file. Include the TIN boundary as a closed polyline at elevation zero, and the fault lines as 3D polylines. All TINs produced shall be checked by ground based survey methods.

B8.7.1 A TIN certificate shall be submitted, signed, and sealed by the responsible PLS and shall contain the following: 1) the methods used to gather data for production of the TIN(s), 2) the accuracy of the TIN(s), and 3) the checks used to substantiate the accuracy of the TIN(s). All ground based TIN(s) shall be field checked before final submittal, and this shall be stated on the TIN certificate. All TIN(s) shall be checked by a PLS using withheld Topographic points randomly collected throughout the TIN(s) area. A minimum of 50 points shall be collected. Provide a spreadsheet showing the elevation differences from the TIN(s). A sample certification of TIN is available from the Contracting Agency's Survey Section.

B8.8 Coordinate Files

Coordinate Files shall be comma-delimited ASCII text files. Data shall be in the sequence Point Number, N, E, Z, and Description. Coordinates shall be given to four decimals for the Northings and Eastings, and two decimals for elevations. Points of unknown elevation shall have a placeholder of -9999 in the Z position. Descriptors are to be case sensitive, e.g.: Rebar5 shall not equal REBAR5. Descriptors for found or set monuments shall follow examples provided by the Contracting Agency.

B8.8.1 Point Numbering Scheme. The following point numbering scheme shall be used:

Range	Use
1-200	Primary Control Set (main project, line-of-sight traverses)
201-300	Primary GNSS Control
301-400	Aerial Control Panels or Naturals (HV's)
401-550	Secondary Control Points (Spikes/Nails)
551-600	Recovered Published Hz. Control (NGS, NOS, etc.)
601-700	Set or Recovered Vertical Control
701-2000	Fnd Mons/Prop Cors
2,001-5,000	Computed/Protracted Points, Search, Pre/Post Stakeout
5,001-20,000+	Topography Survey Points

The Surveyor shall ensure that point numbers used in this task do not conflict with point numbers used in other survey tasks on this project.

B8.9 Electronic Data

Electronic Data (drawing files, coordinate files, reports, etc.) shall be submitted on appropriate size and type of digital media.

B8.10 Quality Control

Quality Control shall be performed by the Contractor prior to all submittals. Three dimensional backsight checks shall be recorded at the beginning and end of all instrument setups. Three dimensional coordinate checks shall be recorded at the beginning and end of an RTK GNSS work session. These checks shall become part of the submittal, labeled as “Quality Control Checks” within the Control Summary deliverable. The Contracting Agency will reject submittals that do not substantially conform to the requirements of this statement of services.

B8.11 Reviews.

Draft documents required under this agreement shall be submitted to the Contracting Agency Survey Manager for review. The Contractor shall allow three (3) weeks for the return of written comments. The Contractor shall address and respond to these comments to the satisfaction of the Contracting Agency prior to submitting the final documents.

B8.12 Submittal Delivery.

Deliverables shall be submitted to the Contracting Agency in accordance with the negotiated schedule.

ARTICLE B9 SURVEYING AND MAPPING SERVICES (Task 1)

B9.1 Overview

B9.1.1 General. The Contractor shall research all information applicable to the requirements of the assigned project and perform all necessary field and office services necessary to collect geospatial data and to reduce the collected data to a form useful for the Contracting Agency’s project.

B9.1.2 Survey Scope and Limits. The Consultant shall provide Design and Right-of-Way Surveying, limited Right-of-Way Mapping, Post-Construction survey, and other survey as determined to be needed during design.

B9.1.3 Survey Services shall be performed in the following sequence unless otherwise directed by the Contracting Agency:

- A. Research
- B. Pre-Work Meeting with ADOT&PF
- C. Control Survey
- D. Aerial Photography/Photogrammetry (NIC)
- E. Topographic/Planimetric Survey
- F. Bridge Site(s)/Drainage Survey (NIC)
- G. Special Features
- H. Right-of-Way Survey (NIC)
- I. Right-of-Way Mapping (B9.5.2)
- J. Preconstruction Surveying (NIC)
- K. Post Construction Surveying
- L. Right of Way Engineering Closeout Services (NIC)
- M. Aeronautical Surveys (NIC)

B9.2 Control Surveys

B9.2.1 General. Control surveys include establishing horizontal and vertical control points as directed by the Contracting Agency. The Contractor shall prepare a Survey Control Diagram (SCD) showing the results of the control survey. The SCD will be a recorded document, and as such, will need to meet certain criteria. All points used or tied as a part of these control surveys shall be included in the project coordinate file and shown on the SCD. SCD guidelines are available from the DOT&PF Survey Section. Prior to performing field surveys for the project, the Contractor shall meet with the Contracting Agency's Survey Manager, or their designee, to get existing Department control data and to discuss the control requirements for the project.

B9.2.1.1 Basis of Horizontal Control. When the primary control is provided by the Contracting Agency, it shall be held as the basis of control for the project. Contact the Contracting Agency if the provided control is found to be disturbed or out of tolerance. Any auxiliary control points necessary to augment this control shall be incidental to the task for which it is required. When the primary control is to be performed by the Contractor, the basis of control shall be as directed by the Contracting Agency's Survey Section. The local project coordinate system to be used shall be based upon transformation parameters supplied by the Contracting Agency.

B9.2.1.2 Horizontal Control Standards. All horizontal control survey measurements and references shall be recorded in field books. Electronic data collection can be used to record control data, but is not acceptable as the sole data source for survey measurements. Distances shall be measured and recorded in both feet (nearest 0.01 foot) and meters (nearest 0.001 meter) as a check. Recorded angle sets, at a minimum, will contain 2 direct and 2 reverse measurements of the forward angle right. When the difference between a direct and reverse pointing of an angle pair exceeds six seconds (ten seconds for distances of 150 feet or less), then that angle pair shall be rejected and re-measured. The mean angle aright shall be used for all computations. All foresights and backsights shall be of the fixed leg type. Secondary control points may be side-tied in the same manner. Secondary control points shall be, at minimum, a mag-nail in paved areas or a 6-inch spike in unpaved areas.

All traverses performed shall meet or exceed the standards for Third Order Class I, Traverse Surveys as specified in the ASPLS Standards of Practice. All traverses shall be closed; beginning and ending at known points with an allowable linear error of closure of 1:10,000 or better. In no case shall ground traverses run greater than 2 miles between GNSS controlled points. Static GNSS work shall meet current CGCC Standards for Band IV Surveys. Traverse and GNSS network adjustments shall be by simultaneous least squares adjustment methods.

All cadastral, property, or right of way corners controlled with GNSS shall be done using Static GNSS survey methods. These corners are to be considered secondary control and need only to be occupied once, providing there is a minimum of two 20 minute duration vectors from project control computed for the corner position that differ by no more than 0.08 feet horizontally.

The use of Post-Processed Kinematic (PPK) or Real-Time-Kinematic (RTK) GNSS procedures are not allowed for establishing control.

B9.2.1.3 Primary Horizontal Control. For Highway Projects or traverses along road corridors, GNSS control points shall be set at approximately 2 mile intervals within the project limits, in areas where they may be easily traversed in and out of. These points shall be used for both the project horizontal and vertical control. A 9/16" dia. stainless steel rod shall be used for these deep monuments. A minimum 4" dia. well case of length 2.5 feet shall be set around each monument with a protective cap and marker post. These points shall be driven to a maximum of 40 feet or refusal,

whichever is less. An acceptable alternative would be to cement a cap into a solid rock outcropping or bedrock, or a dig-in type flared-base monument where conditions warrant.

Additional intervisible traverse points, as needed, shall be set at maximum 1320 foot intervals, and shall consist of a minimum 5/8" x 24" rebar (5/8" x 8" in pavement) with identifying cap. These points shall be located off of the existing paved surface wherever possible, and shall be set at least 0.1 foot below the existing ground surface. No spikes or nails shall be used as the Primary Horizontal Control.

All primary horizontal control points and reference points, found or set, shall be shown on the SCD.

The Contractor shall prepare a narrative horizontal control summary detailing the datum, primary control points used, Basis of Bearings, type of adjustment performed and statistics, problems encountered during the survey, equipment used, etc., which shall include annotated copies of control computations and control adjustments, and a horizontal control statement. For GNSS control surveys, the Contractor shall also provide a RINEX2 format data file of at least 8 hours of GNSS data for at least two control points for at least two different days in the Contractor's control network. The Contracting Agency recommends logging as much data on as many different days as possible to account for any solar disturbances or other unanticipated problems that might occur.

B9.2.1.4 Basis of Vertical Control. When primary vertical control is provided by the Contracting Agency, it shall be held as the basis of control for the project. Any auxiliary control points necessary to augment this control shall be incidental to the task for which it is required. When the primary vertical is to be established by the Contractor, the vertical datum shall be determined by the Contracting Agency. Note: A tie to MLLW shall be made for all surveys in or adjoining tidally influenced areas unless specifically directed to do otherwise by the Contracting Agency.

B9.2.1.5 Vertical Control Standards. All vertical control survey measurements shall be recorded in field books. If an electronic digital level is used and the data is recorded electronically the Contractor shall provide annotated copies of the raw and reduced data. All vertical survey circuits shall meet or exceed the standards for third order leveling as specified in the latest printing of the Federal Geodetic Control Committee's Standards and Specifications for Geodetic Control Networks. All vertical control points shall be part of a closed level loop; side-shots are not acceptable. Each loop shall be adjusted and this adjusted elevation used for any further loops. Loop closures and loop-adjusted elevations shall be shown in the field books. The books shall also be used to record descriptions and sketches of vertical control points found or set, condition of found points, and for electronically recorded data the loop information (start point, point(s) controlled, end point, etc.) necessary to interpret the data. Primary vertical control points (BM's and TBM's) shall be controlled by differential leveling. Elevations may be established for secondary control points by closed trigonometric loops, in which case sight distances shall not exceed 750 feet with foresights and backsights of approximately equal lengths, and the line of sight shall clear obstacles by a minimum of 1.5 feet to avoid the effects of adverse refraction. Elevation differences shall be measured and recorded to the nearest 0.01 foot.

B9.2.1.6 Primary Vertical Control. For highway projects or projects along road corridors, primary vertical control points shall be established every ½ mile or less. Existing official bench marks (BM's) shall be used wherever possible, with intermediate temporary bench marks (TBM's) established between them. These TBM's shall be stable objects such as luminaire and signal pole base bolts, spikes in trees, etc. Wooden utility poles, scribes in concrete, and traverse points shall not be used for TBM's. Contact the Contracting Agency for direction if no suitable TBM locations exist. Where no permanent official bench marks exist, the Contractor shall establish a minimum of two permanent bench marks per project site, or one per mile, whichever is the greater number, for use

through project construction. Permanent bench marks shall be at a minimum, 9/16" dia. stainless steel rod driven no more than 40 feet or until refusal into dry ground, encased by a 2.5 foot section of 4" dia. well casing flush with the ground with a rubber cap covering the top of the pipe, or a brass cap cemented into rock outcrops or stable concrete structures; e.g., bridge abutments or building foundations and walls. These points may also satisfy the requirements for Horizontal control, under section B9.2.1.3. A marker post shall be placed near each permanent benchmark, found or set. Refer to the NOAA Manual NOS NGS 1, Geodetic Bench Marks for recommended guidelines for setting permanent benchmarks.

Primary vertical control points, found or set, shall be described in great detail, identifying the particular physical feature used for the elevation point, and sketches shall be made to aid in this effort. Instructions sufficient to enable someone unfamiliar with the project to find these points shall be recorded; these instructions shall include distances and directions from recognizable terrain features such as major intersections, bridges, buildings, etc. All primary vertical control points, found or set, shall be tied to the project horizontal control and shown on the SCD.

The Contractor shall prepare and provide a narrative vertical control summary detailing the datum, primary control points used, vertical network adjustment data, problems encountered during the survey, equipment used, etc., which shall include an NGS benchmark data sheet if available.

B9.2.2 Survey Control Diagram. The Contractor shall prepare a Survey Control Diagram (SCD) for the project showing the relationship between survey monuments set and found in the field. The SCD typically shows all horizontal and vertical control found or set in the course of a survey, as well as all found or set monuments that exist in the roadway. The SCD will be recorded as a Record of Survey in the appropriate Recording District by the Contracting Agency once approved. In cases where Right of Way Mapping will not take place as part of a project, the Contractor may be required to show all monument ties on the SCD, as directed by the Contracting Agency.

B9.2.3 Survey Control Sheet. The Contractor shall prepare a Survey Control Sheet (SCS) for the project showing the relationship between the final project centerline and survey monuments in the field. This differs from a Survey Control Diagram (SCD-see section B9.2.2) in that the SCD does not show the final project centerline. The SCS shall be part of the construction plan set and its principal users will likely be Land Surveyors staking the project centerline prior to and after construction or replacing corners that have been disturbed, Contracting Agency surveyors checking that work, and the Project Engineer to ensure that existing monumentation does not get disturbed. Other near-term users may include Land Surveyors who are performing boundary work in the vicinity of the project. The SCS may be recorded as a Record of Survey, but typically is not. The SCS must not be prepared before the final design centerline is known, typically after the Pre PS&E Review. Samples are available from the Contracting Agency's Survey Section.

B9.2.4 Electronic Photographs. To assist in the point identification, verification of markings, condition of monument and accessories, we ask that .jpg digital photographs be gathered of all monuments found, set, or tied. Each corner should have a minimum of three photographs: one readable close-up of the cap, one near distance showing monument condition, and one with an overview of the monument and its surroundings (it helps to have a tripod setup over the point or some other indicator like fiberglass post to find monument in surrounding picture). All original bearing trees and other accessories of record should also be photographed for these corners. The photographs should be indexed by point number, with the point number in the file name to aid identification of the point. Many times a chalkboard or other similar device can be used in the field to identify the point in the photographs by writing the point legal designation and project point number on the board, and placing board in scene of the pictures. Resolution/File Size should be limited to no more than 1Mb per photo, or a resolution of no more than 2048x1356.

B9.3 Survey for Design

B9.3.1 General. Design Surveys include topographic, hydrographic, photogrammetric, and other geospatial methods of data collection associated with defining the existing ground surface and both natural and man-made features.

B9.3.2 Monument Ties. The Contractor shall research, locate, photograph, and verify all monuments within the existing Right-of-Way limits and the proposed construction limits. If the Contracting Agency previously performed a field survey tying monumentation, the existence of these monuments shall be field verified. This will insure that the Contracting Agency can comply with the provisions of AS 19.10.260 and AS 34.65.040, and enable an estimate of quantities to be made. Examples would be Rectangular or Centerline monuments. In the event there is no Right of Way survey performed, these corners will need to be surveyed using the methodology described in section B9.2.1.2, so their position can be accurately reestablished.

B9.3.3 Remote Sensing. When directed by the Contracting Agency, the Contractor shall obtain remotely sensed and associated mapping products. The Contracting Agency shall be granted rights to use of the data and associated delivered products, for our project design and other in-house uses, including transmittal to others.

B9.3.3.1 Photogrammetry. As an alternative to ground surveying, the Contractor may use controlled aerial photography to provide planimetric and topographic information. Use of photogrammetric data for this project is subject to the Contracting Agency's approval. As aerial photography may be used for a variety of analyses, the photography shall be natural color and have sufficient scale and resolution to allow for the preparation of the photogrammetric products, which meet the required accuracies and provide economical acquisition. Aerial photography used for topographic mapping products shall be acquired during leaf-free and snow free conditions. Aerial photography used solely for orthophoto products may be acquired with leaf-on conditions. Existing photography may be substituted for new photography with the approval of the Contracting Agency Project Manager. All acquired aerial photography, and all photogrammetric products prepared by the Contractor, shall conform to the guidelines and standards of the US COE Manual EM-1110-1-1000. The Contractor using methods suitable to return the desired mapping accuracies shall control aerial photography used for mapping products. Horizontal and vertical datum for the photogrammetric products shall be on the same datums as that used for the project control. Any photo pre-mark panel points shall be set and controlled for this task, using the same methods and materials as detailed for auxiliary control points presented above for Horizontal and Vertical Control. The Contractor shall determine the number of, location of, and panel size for these points in conjunction with the firm performing the aerial photography. Each photogrammetric control point shall be marked using appropriate panel material. The Contractor shall remove and dispose of all panels set under this contract at the direction of the Contracting Agency. The use of the most cost effective techniques that will provide the specified products is encouraged. All photogrammetric products for development of TINs shall meet the format, content, accuracy and certification requirements of Section B9.3.4.1 through B9.3.4.6 unless directed otherwise by the Contracting Agency.

If aerial photography is acquired for, or available for use on this project, a digital orthophoto, geo-referenced to the project coordinates, shall be provided to the Contracting Agency for use in design. Orthophotos shall be delivered in two formats with the associated world files: uncompressed .TIF, and compressed MrSID image file.

B9.3.4 Topographic Survey. Topographic features shall be surveyed using appropriate data collection methods. The Contractor shall provide complete topographic mapping in a single AutoCAD drawing file along with a single TIN upon completion. All points located in these surveys shall be included in the project coordinate file. The Contractor shall:

B9.3.4.1 Define the existing ground surface by creating a Triangular Irregular Network (TIN). The TIN shall be capable of accurately generating 1 foot contours in all areas. Hard shots (pavement, concrete, etc.) shall have vertical accuracy of less than 0.1 foot. The TIN shall incorporate fault lines (grade breaks, existing centerlines, edges of pavement, curbs [flowline and top back], sidewalks, shoulders and/or tops of bank, toes of slope/fill, ditches and/or drainages, etc.) and additional shots as necessary to insure that the TIN accurately represents the existing ground surface. The TIN shall not represent water surfaces. Sufficient data shall be gathered along driveways and side streets to allow grade matching. Provide TIN verification in the form of the Contracting Agency's TIN Certificate.

B9.3.4.2 Locate and map all existing improvements and utilities (above and below ground) within the survey limits. Mapping of overhead utility wires shall include the apparent low point of the wire sag. Overhead wire crossings shall also be located at the existing and proposed centerlines. Elevations for these points shall be the bottom wire elevation. Locate all attachments (guy wires, pedestals, stand pipes, load centers, lights, etc.) within the project survey limits. This includes, but is not limited to, power, telephone, fuel lines, water and sewer lines, cable television, edge of pavement, fences, signage, and navajds within the survey limits. Note any historical sites located in this area. Caution shall be used to avoid disturbing any historic remnants. Locate the edge of trees and identify the approximate average height of the trees at the edge. Locate the limits of any apparent contaminated soils and waters within the project area. Tie to any Corp of Engineers flood plain datums. For Airports: Heights of towers, antennas and any other structure that could be considered a hazard to aircraft shall be included. Determine location, finish floor elevations, peak roof elevations and a description of all buildings in and within 100 feet of the surveyed area. Locate the first tier of structures lying outside of the proposed airport boundary and within 200 feet of that boundary.

B9.3.4.3 Locate and map all drainage structures within the survey limits. Record diameter, length, invert elevations, structure type and condition, high water marks, and apparent flow direction.

B9.3.4.4 Locate and map any other physical feature, natural or man-made, including any ordinary or mean high water boundaries that could affect the design of the project, as directed by the Contracting Agency.

B9.3.4.5 After the Contracting Agency has reviewed the provided data, the Contractor may need to extend the TIN & topographic mapping as specified by the Contracting Agency.

B9.3.4.6 Locate and tie, both horizontally and vertically, all proposed and existing geotechnical sample locations. The Contractor shall stake the baseline or sample locations as directed by the Contracting Agency.

B9.3.5 Bridge Site/Drainage Survey. The Contractor shall perform drainage surveys in the vicinity of proposed channel crossings or major drainages. All work shall be tied to project horizontal and vertical control. Surveys shall be performed as specified in the Preconstruction or Drainage Manual unless otherwise directed by the Contracting Agency. The Contractor shall coordinate with the Contracting Agency for site-specific requirements. The data collected for these surveys shall be incorporated into the TIN and topographic files, and all shots taken shall be included in the project coordinate file.

- F. Survey Control Sheet(s): Electronic CAD and PDF copy. (B9.2.3)
- G. GNSS Data: For GNSS control surveys, the Contractor shall provide RINEX2 GNSS data files of 8 hours length for at least 2 control points, along with any GNSS processing or OPUS reports. (B9.2.1.3)
- H. Electronic Pictures: Organized folders containing all of the control, monument ties, and project site photos. Do not use separate folders for each point. If applicable, the point number should be referenced within the image filename. (B9.2.4)
- I. TIN: All TIN files with a sealed and signed certificate of accuracy. Quality control check spreadsheet showing the differences from the true values.
- J. Bridge Site/Drainage Survey mapping – **(NIC)**: Electronic drawing files and TIN files (B9.3.5.2)
- K. Bridge Site Report – **(NIC)**: Refer to the Preconstruction or Drainage Manual, and or the Contracting Agency for possible additional information. (B9.3.5.4)
- L. Project Drawing: A single complete and edited AutoCAD drawing file of the entire survey limits, containing topographic mapping (points, surfaces, annotations, metadata), base-mapping, bridge site/drainage surveys. (B9.3.4)
- M. Air Photo Report: A report of the photogrammetric control shall be provided including all ground control points, aerial photography camera logs, airborne GNSS control procedures and results, analytical aero triangulation results, current camera calibration reports, and other data associated with control of the aerial photography. (B9.3.3.1)
- N. Ortho Photo Mosaic: .tif format files shall be delivered in files less than 250MB in size. A compressed image file in MrSID format shall also be included. An index file showing the project area and the areas covered by the individual files shall be included. (B9.3.3.1)

B9.4 Surveying for Right-Of-Way

B9.4.1 General. The Contractor shall perform the following services to the standards in B9.2. Typically the surveying for ROW is performed after horizontal control is established for the project. Any exceptions shall be discussed at the project pre-work meeting.

B9.4.1.1 Prior to commencement of the survey, the Contractor shall review any title documents and mapping in the Contracting Agency's possession which is considered relevant to the project. The Contractor shall be responsible for researching additional relevant documentation from other sources. These documents include but are not limited to the following:

Bureau of Land Management (BLM) and Department of Natural Resources (DNR) land status plats, BLM township survey plats, Mineral and U.S. Survey plats and field notes, any records of survey, subdivisions, and relevant engineering control surveys, United States Coast and Geodetic Survey (USC&GS)/ National Geodetic Survey (NGS) control diagrams-descriptions, DOT&PF right-of-way records and other easement or boundary documents of record, DOT&PF engineering as-builts, DOT&PF Airport Leasing documents, DNR surveys, and aerial photos, DEC Community Profile Maps, Local or Municipal data.

All research for property corner ties (generally includes local platting authority subdivision plats and right-of-way plats, BLM U.S. Surveys, state land survey plats, waiver documents, deeds, record of surveys and monument records) should be done prior to commencement of searching and tying property and ROW controlling corners.

B9.4.1.2 Tie the nearest Public Land Survey System (PLSS) monuments (Section, 1/4 Section and 1/16 Section Corners) left and right of the project Right-of-Way corridor or if existing monuments that represent the legal corner positions do not exist at those locations, sufficient additional rectangular monuments and/or accessories to control the computations of the legal locations of those corners per the relevant BLM Manual of Surveying Instructions for Public Lands. Any corner

monument in need of rehabilitation or re-monumentation shall first be photographed, and then have rehabilitation accomplished prior to tying the monument location and re-photographing the final condition. The intent of the PLSS monument ties is to define the larger remaining parcel surrounding the existing road Right-of-Way.

Tie all existing centerline monumentation throughout the project limits including two centerline monuments at each end that extend beyond the limits of the project. Additional PLSS monuments shall be recovered to allow section breakdown for property boundary determination as directed by the Contracting Agency. Tie adequate centerline monumentation on side streets to determine side street alignment to the project limits. A minimum of two side street centerline monuments shall be tied. If side street centerline monuments are not recovered then sufficient block or lot corners will be tied to define the side streets.

For the initial surveys all property corners within and along the existing ROW and the ROW centerlines should be searched for, documented and tied. In most cases, there will be some non-fronting property corners also required to be tied to setup subdivision blocks, survey boundaries and side-street ROWs. Sufficient control is required to establish the location of all surveys adjoining the ROW, or where acquisitions are planned. The extent of the corners to be tied normally is discussed and clarified during contract negotiations or at the survey pre-work meeting.

B9.4.1.3 For projects with PLO ROWs or other ROWs dependent on the physical road location (such as prescriptive claims), tangent asbuilts are required. This procedure normally requires the field determination of pavement or unpaved surfaces centerline by physical measurement, and then location of those points. Points are normally surveyed near each tangent end and a minimum of 3 points on curves. The number of shots actually required depends on curve length and degree of curve and should be clarified in writing at the pre-work meeting. The Contractor at the direction of the Contracting Agency may also be tasked with developing an alignment and locating existing slope or clearing limits. Please consult the Contracting Agency's ROW Engineering section for guidance.

B9.4.2 Record of Survey. A Record of Survey shall be prepared for recording in the appropriate Recording District for the Right of Way survey. All Right of Way surveying completed above in section B9.4.1 shall be included in the Record of Survey. Consult with the Contracting Agency for guidance in the preparation of the Record of Survey.

B9.4.3 Annotated Plats and Research Documents. PDF Copies of all of the research documents for the rectangular survey, centerline monuments, ROW monuments and property corners shall be provided, along with annotations of whether the point was searched for and not found, or monument destroyed, or if found it's corresponding project point number. These annotations do not need to be "works of art", and many times are the original paper plat copies, or scans of such, that the field crews had in the field with them. The annotated plats should be indexed in some method (by Section Location, MOA grid, or other logical means), placed in labeled folders organized by the indexing scheme.

B9.4.4 Additional Topography for Right-of-Way Acquisition. The Contractor shall collect all topographic information that may affect the cost and/or schedule of defined right-of-way acquisitions for the project, such as culverts, land service or access roads, improvements, apparent contaminated soils or waters, buried fuel tanks, fences and any structures. Septic system, well and building locations are examples of pertinent data, usually outside of the acquisition area, that may affect the value of the right-of-way to be acquired.

B9.4.5 Deliverable Items. The deliverables shall be organized electronically in folders according to the following list. Only submit what is required for your specific project. Do not submit extra information not required by the Contracting Agency. Name the files and folders according to what they

represent. Do not use contractor specific job numbers. CAD drawings should be named in such a manner that anyone can tell what it represents without having to open the drawing. An example would be “Sleetmute_ROW.dwg”, and not “06-342.dwg”. The Contractor shall submit the following items related to their Survey to the AK DOT&PF Survey Section:

Deliverable Description

- A. Field Books: The original field books or PDF indexed, reduced, stamped and checked.
- B. An ASCII coordinate file containing all recovered, computed, and topographic points in the local system (if provided). Electronic format shall be submitted. Elevations that are not valid TIN elevations shall be shown as -9999.
- C. An ASCII file listing all descriptors used and an expanded description of their meanings. Descriptors not used on this project shall not be included in this list. This file shall be submitted with the draft coordinate file.
- D. Right of Way Survey Report Memo. A brief description of the survey methods, equipment, computations, quality control checks and accuracy estimates.
- E. Survey Control Diagram (Record of Survey): Electronic CAD and PDF copy. (B9.2.2)
- F. Annotated Plats and Research Documents. (B9.4.3)
- G. GNSS Data: For GNSS control surveys, the Contractor shall provide RINEX2 GNSS data files of 8 hours length for at least 2 control points, along with any GNSS processing or OPUS reports. (B9.2.1.3)
- H. Electronic Pictures: Organized folders containing all of the control, monument ties, and project site photos. Do not use separate folders for each point. If applicable, the point number should be referenced within the image filename. (B9.2.4)

B9.5 Right-Of-Way Mapping (B9.5.2)

B9.5.1 General. The Contractor shall perform the services necessary to establish the existing Right of Way, and, prepare ROW Lines for Construction Plans, Base Maps, Right of Way Maps, Parcel Plats, Airport Property Plans, Airport Land Occupancy Maps, and Right of Way Acquisition Plats in accordance with the DOT&PF Right of Way Manual and specific instructions from the Contracting Agency.

B9.5.2 ROW Lines for Construction Plans. The Contractor shall submit an electronic drawing file which contains the existing ROW lines, existing ROW centerline, adjoining property lines and subdivisions. The Contractor shall include a narrative of the ROW that is being shown. Narrative shall include source documents and methods used to determine existing rights-of-way.

B9.5.3 Base Maps shall show the entire project limits and shall include a DOT&PF standard Right of Way title sheet, legend sheet, tract maps, plan sheets, monument summary sheets, and general notes sheet including a source document table using Contracting Agency supplied AutoCAD format at the scale and layout specified by the Contract Manager. The plan sheets shall show the following information:

- A. Existing property boundaries, including all Public Land Survey System survey lines.
- B. All subdivisions, including name, plat number, lot and block, or aliquot part description, and easements as shown.
- C. Existing right of way centerline.
- D. Existing rights-of-way
- E. Improvements.
- F. Other features required by the Right of Way Manual and /or the Contracting Agency.

B9.5.3.1 When preparing Base Maps, the Contractor shall (a) thoroughly document sources of existing rights-of-way (b) resolve problems with existing Right of Way and boundary locations and (c) analyze preliminary engineering information to determine where additional survey ties are required. The Contractor shall provide a written summary of (any significant) Boundary Problems encountered in making specific boundary determinations, including rationale for the solution. The Contractor shall provide digital copies of all research with the preliminary Base Map.

B9.5.3.2 The Contractor shall not begin preparing Base Maps without prior specific written authorization from the Contracting Agency.

B9.5.4 Right of Way Maps shall show the entire project limits and shall include a DOT&PF standard Right of Way title sheet, legend sheet, tract maps, plan sheets, and monument summary sheets. The plan sheets shall show all the information required for the Base Maps plus the following information:

- A. Proposed Right of Way.
- B. Proposed project centerline.
- C. Station and offsets to right of way limits.
- D. Easements.
- E. Parcels.
- F. Parcel Information Block.
- G. Proposed slope limits.
- H. Revision block.
- I. Other features required by the Right of Way Manual and /or the Contracting Agency.
- J. For Airport Property Plan and Airport Acquisition Plat (in addition to the above):
 - 1. Plan view showing Tracts and Parcels.
 - 2. Runway Centerline end coordinates in the NAD83 CORS datum.

B9.5.4.1 When preparing Right of Way Maps, the Contractor shall:

- A. Resolve survey conflicts with existing right of way and boundary locations.
- B. Analyze preliminary engineering information to determine where additional survey ties are required.
- C. Examine Title Reports and adjust preliminary boundaries, add additional easements and update owner information as required.
- D. Compute the Take and Remain areas of each parcel based on right of way requirements supplied by the Contracting Agency.
- E. Prepare Map per appropriate platting codes.

B9.5.5 Parcel Plats. The Contractor shall prepare plats for all parcels to be acquired for this project when directed by the Contracting Agency. Note: full takes do not need a parcel plat prepared. Parcel plats shall contain the information required by the DOT&PF Right of Way Manual. The Contractor shall make revisions to Parcel Plats requested by the Contracting Agency. Parcel Plats shall use the Contracting Agency's standard 8-1/2 by 14 inch format and be submitted as a PDF or in a format specified by the Contracting Agency. Plats shall be at a scale suitable for legibility and clarity of detail using Contracting Agency supplied AutoCAD format and shall contain information as required by the DOT&PF Right of Way Manual and the parcel plat checklist. A Title block and border drawing file will be supplied by the Contracting Agency.

B9.5.6 Airport Property Plan and Airport Acquisition Plat. The Contractor shall prepare an Airport Property Plan according to the DOT&PF Right of Way Manual. The Airport Property Plan is considered similar to a Base Map and relates the existing property boundary and property status. An

Airport Acquisition Plat is necessary for acquisition areas in the Unorganized Borough and is required to follow the regulations as set for Right-of-Way Acquisition Plats by Department of Natural Resources.

B9.5.7 Airport Land Occupancy Maps. The Contractor shall research current and historic airport tenant lease documents, resolve any found discrepancies and map errors, and provide an updated Airport Land Occupancy (LO) Map, as directed by the Contracting Agency.

B9.5.8 Right-of-Way Negotiations. The Contractor shall provide technical support for right-of-way negotiations. This shall include interpreting documents prepared for the project and explaining project impacts to the Contracting Agency's personnel, property owners, and others. The Contractor shall also attend meetings as required to make presentations and answer questions.

B9.5.9 Pre-Acquisition Meeting. When requested by the Contracting Agency, the Contractor shall attend the pre-acquisition meeting. The purpose of this meeting is to discuss proposed project features and impacts to adjoining properties and parcel configuration prior to plat approval and acquisition. The Contractor should be prepared to discuss any design features which may affect adjoining properties such as project alignments, pathways, sidewalks, medians, curb and gutter, slope limits, impacts to driveways and utilities. Adjoining property information shall include lot boundaries, buildings, driveways, and any other features/improvements that will help the Contracting Agency in negotiations with affected property owners and others to assess project impacts. In addition to preliminary right of way plans, the Contractor may be requested to provide additional visual displays for clarification.

B9.5.10 Reviews and Schedule. The Contractor shall submit drafts of the Base Maps, Right of Way Maps and Parcel Plats, for the Contracting Agency's review, in accordance with the following: Base Maps shall be submitted with the Local Review Assembly. Right of Way Maps including proposed takes for project construction shall be submitted with the Plans-In-Hand Review Assembly. Right of Way Maps including proposed takes for the project and all required utility relocations shall be submitted within four months of the Plans-In-Hand Review submittal. Current Right of Way Maps shall be submitted with the PS&E Assembly. The Summary of Boundary Problems shall be submitted with the drafts of Base Maps. The Contracting Agency shall have a minimum of four weeks for the return of written comments. The Contractor shall address comments to the satisfaction of the Contracting Agency prior to submitting final documents for Right of Way Certification.

B9.5.11 Deliverable Items. The Contractor shall submit draft and final Base Maps, Right of Way Maps and Parcel Plats in PDF and DWG format for Contracting Agency review. Electronic copies of all research and the Summary of Boundary Problems shall be submitted with the draft Base Map. If requested by the Contracting Agency, the Contractor shall provide full sized Mylar with original signature for recording along with the final Base Map submittal. Prior to Right of Way Certification, the Contractor shall submit two final Right of Way Maps on 11x17 paper with original signatures and one full size Mylar with original signature.

B9.5.12 Provided Items. The Contracting Agency will provide the following (item A can be found on the DOT&PF web site. Items B-D can be obtained on the DOT&PF FTP site. Call 269-0680 for site addresses):

- A. One copy of the Title and Plans Section from the DOT&PF Right of Way Manual.
- B. Samples of final drawings, parcel plats, and title reports.
- C. Civil 3D Drawing Template
- D. The Contracting Agency's Standard Right of Way legend sheet.
- E. Original Title reports for each property to be acquired.

B9.6 Pre & Post Construction Surveys (B9.6.3)

B9.6.1 General. In order to best perpetuate the positions of DOT&PF Project Centerline Monuments, we encourage the use of Static GPS ties to permanent control stations that are set outside project limits, and are expected to last well beyond construction.

B9.6.2 Pre-Construction. When directed by the Contracting Agency upon completion of the design phase of the project, but prior to advertising for construction, the Contractor, using the previously established project control shall monument the project (PC's, PT's, and no-curve PI's, etc.) using conventional methods. All monuments established shall consist of a minimum 5/8" dia. X 24" rebar (5/8" dia. X 8" in pavement) with a 2" dia. cap, and stake nearby. Once set, all monuments shall be photographed and re-tied to verify their position (B9.2), and a comparison to the design coordinates shall be presented to the Contracting Agency in spreadsheet format. This information shall be presented in project staking report.

Static GNSS Control points for this task shall be set at approximately two mile intervals, or closer for a small project, outside of the construction limits, so as to last for the duration of the project. A plan identifying the type of monument to be set for control, and its proposed location, shall be submitted to the Contracting Agency prior to the work being performed. Control points from the design survey effort may be used for this effort upon approval.

Monuments that may be disturbed during construction shall be referenced by static GNSS to the off-project control. It shall be the Contractor's responsibility to coordinate with the Agency or Firm developing the Right of Way Mapping to identify these monuments. Two in line conventional reference points, set outside the construction limits, may be used in the cases where static GNSS will not work. Two vectors at a minimum shall establish the position of the monument to be referenced. These two vectors shall differ by no more than 0.08 feet.

This procedure is further explained here:

http://www.dot.state.ak.us/creg/dot-cadastral/Construction_Surveys/Centerline_Referencing_and_Perpetuation_2011.doc.

B9.6.3 Post-Construction. When directed by the Contracting Agency, and upon completion of the construction phase of the project, the Contractor shall establish and monument the project and a random control line. Monument type and spacing shall be determined in discussions with the Contracting Agency. In the case of a project centerline, the points shall be established using the data from the Pre-Construction effort. Right of Way monumentation that was referenced prior to construction shall be field verified that it was not disturbed. A digital photo shall be required as proof. Any disturbed ROW monuments shall be reestablished as part of this effort. This procedure is further explained here http://www.dot.state.ak.us/creg/dot-cadastral/Construction_Surveys/Centerline_Referencing_and_Perpetuation_2011.doc. A final Record of Survey or data incorporation into the project Right of Way Mapping shall be completed that shows any new monumentation set.

B9.6.4 Final Record of Survey (Airports). When directed by the Contracting Agency, and upon completion of the Construction phase, the Contractor shall complete the final Record of Survey which may include, but is not limited to, the following tasks: FAA Aeronautical Survey, locate all navigational aids, as built the runway using guidelines provided by the Contracting Agency, set or check the airport boundary monumentation, set or check the access road monumentation, tie into older horizontal and vertical datums, and establish threshold coordinates. If land was acquired as part of the project, a Right-of-Way Acquisition plat will be developed and recorded in the appropriate recording district.

Deliverable Description

- A. Field Books: The original field books or PDF indexed, reduced, stamped and checked.
- B. Point Files: An ASCII coordinate file containing all recovered, computed, and topographic points in the local system (if provided). Electronic format shall be submitted. Elevations that are not valid TIN elevations shall be coded as such in the descriptor.
- C. Descriptors: An ASCII file listing all descriptors used and an expanded description of their meanings. Descriptors not used on this project shall not be included in this list.
- D. Survey Report and Control Summary: Horizontal and vertical control summaries in ASCII format. The Contractor shall also provide stamped annotated copies of control computations and control adjustments, including a check shot report. (B9.2)
- E. Record of Survey for centerline and random control, and/or Monument of Record Forms (B9.6.3) if this information is not incorporated with the project Right of Way Mapping closeout effort. (B9.5 or B9.7)
- F. Project Staking Report (B9.6.2)
- G. GNSS Data: For GNSS control surveys, the Contractor shall provide RINEX2 GNSS data files of 8 hours length for at least 2 control points, along with any GNSS processing or OPUS reports. (B9.2.1.3)
- H. Electronic Pictures: Organized folders containing all of the control, monument ties, and project site photos. Do not use separate folders for each point. If applicable, the point number should be referenced within the image filename. (B9.2.4)
- I. Right of Way Acquisition plat. (B9.5.6)
- J. Airport as-built Record of Survey (B9.6.4)

B9.7 Right of Way Engineering Closeout Services (NIC)

B9.7.1 Right of Way Engineering Services. Engineering Services may include identification of field surveying and mapping services necessary to close out the various projects, such as a Record of Survey or ROW Acquisition Plat, but the performance of the identified field surveying and associated mapping services will not be part of the initial Right of Way Engineering Services.

- A. The Contractor shall perform the services necessary to reconcile the Right of Way conveyance documents with the Right of Way Mapping in accordance with the Department Project Close Out check list, and specific instructions from the Contract Manager.
- B. The Contractor should check the centerline and right of way geometry (Bearings, Distances, Curves, Station-offsets, Monument Summary Tables etc.) for any mathematical errors to verify that the right of way can be computed from the information shown.
- C. The Contractor shall proof read the vesting documents of record on file with the Department and/or the Records Office. The written legal description and parcel plats will be checked against the Right of Way mapping both visually and for mathematical closure.
- D. The Contractor shall review the Right of Way mapping. The Right of Way mapping shall include (if it applies) the following information:
 - 1. Information as defined in the Project Close Out check list.
 - 2. Lands purchased in excess to the ROW needed for the project. These lands will be identified on the ROW mapping as “X” or “R” parcels on older projects.
 - 3. Commissioner’s Quit Claim Deed or Relinquishment.
 - 4. Lands acquired from DNR will be referenced to the ADL number associated with the parcel.
 - 5. Files involving these parcels are contained within the Department Right of Way Section.
 - 6. Final Judgments need to be researched if there was a declaration of taking on the project.
- E. When reviewing the Right of Way mapping, the Contractor shall identify discrepancies among the ROW mapping, written legal descriptions, and parcel plats. The Department will review and approve and/or modify the corrective actions the contractor is to take.

- F. When directed by the Department the Contractor shall hand edit the original Mylar Right of Way mapping using drafting ink and lettering sets and update any electronic drawings provided by the Department.
- G. The Contractor shall submit copies of the edited ROW mapping to the Contracting Agency who will then submit the plans to the appropriate platting authority for plat approval. When directed by the Contracting Agency, the Contractor shall make the final changes to the Mylars and electronic drawings then submit for final review to the Contracting Agency. After platting authority and Department approval the contractor will sign the Mylars using the Department's Contractor Closeout Certificate.

B9.8 Aeronautical Surveys (NIC)

B9.8.1 General. When directed by the Contracting Agency the Contractor shall perform any and all necessary tasks required by current FAA Advisory Circulars related to the performance and delivery of Aeronautical Surveys. The type and level of effort required will be determined by the Contracting Agency at the time of request. Additional design or ROW survey information may be requested concurrently with an Aeronautical Survey task.

The Contractor shall contact the Contracting Agency's Maintenance and Operation Supervisor, in the appropriate district, to coordinate airport entry procedures and shall exercise caution when working in the vicinity of the runway.

The Contractor shall coordinate with the Contracting Agency prior to fieldwork for threshold locations, runway length, and runway width; no changes to these shall be made without Contracting Agency approval.

Data providers shall make maximum use of existing data for the airport that is traceable to the source to meet the requirements of this Statement of Services before undertaking additional data collection.

B9.8.2 Services. For each of the airports, the Contractor shall perform the following tasks:

The ACs identified below detail the data collection requirements and accuracies for the AOC Survey.

AC 150/5300-16A "General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey."

AC 150/5300-17C "General Guidance and Specifications for Aeronautical Survey Airport Imagery Acquisition and Submission to the National Geodetic Survey."

AC 150/5300-18B "General Guidance and Specifications for Submission of Aeronautical Surveys to National Geodetic Survey (NGS): Field Data Collection and Geographic Information System (GIS) Standards."

Note: The FAA Airports GIS (AGIS) website and the ACs mentioned above are currently being refined and changes to the process should be expected. The Contractor shall use the most current AC upon the start of work for each airport.

B9.8.3 Record of Survey. A Record of Survey shall be prepared for recording in the appropriate Recording District for the Airport Monuments. All temporary monumentation completed above in Section B9.8.2 shall be included in the Record of Survey. Consult with the Contracting Agency for guidance in the preparation of the Record of Survey.

B9.8.4 Deliverable Items. Deliverables will be submitted to the FAA AGIS Portal, and copies of final FAA approved deliverables will be submitted to the Contracting Agency in a local geodetic system as specified by the contracting agency or developed by the Contractor as directed by the Contracting Agency. The Contractor shall submit, for each airport, the following items:

Deliverable Description

- A. AC 150/5300-16A Deliverables:
 - Geodetic Control Plan
 - Geodetic Control Data and Report
- B. AC 150/5300-17C Deliverables:
 - Imagery Plan
 - Georeferenced Imagery & Orthophotos
 - Orthophotos
- C. AC 150/5300-18B Deliverables:
 - Survey and Quality Control Plan
 - Airport GIS Survey Data
 - AutoCAD Support Drawings and Files
 - Final Project Report & Spreadsheet

ARTICLE B10
ENVIRONMENTAL ACTIVITIES
(Task 2)

B10.1 General

The Contractor shall complete the environmental scoping, prepare Section 106 documentation, conduct a wetland assessment, prepare an Environmental Document (categorical exclusion), and acquire environmental permits in support of the project.

B10.2 Coordination

At the direction of the Contracting Agency, the Contractor shall coordinate with the public and with federal, state, and local agencies during preparation of the Environmental Document, and during acquisition, revision, or renewal of environmental permits. Correspondence to agencies shall be on Contracting Agency letterhead. In coordinating with the agencies, the Contractor shall not negotiate or in any way commit the Contracting Agency to any specific mitigation plan or course of action.

B10.2.1 Review and Revision Schedule. All reviews and revisions shall be completed according to an agreed upon schedule that shall allow approximately thirty (30) working days for each FAA review, and twenty-one (21) working days for each Contracting Agency Review; see Section B5.1.

B10.3 Administrative Requirements

All work shall be done in accordance with 36 CFR Part 800, FAA Order 1050.1F, FAA Order 5050.4B or most current version (Airport Environmental Handbook), the Secretary of the Interior's Standards and Guidelines (1983:44722), and the Advisory Council on Historic Preservation's general guidelines for identification and testing procedures as set for in Treatment of Archeological Properties, A Handbook. In addition, the Contractor shall coordinate with the local Tribal Government (i.e. on the agency scoping letter list and kept informed) in regard to identifying any historical, archaeological, and cultural sites that might be impacted by the project.

B10.4 Environmental Scoping

The purpose of the environmental scoping is to solicit views of agencies, organizations, and the public, and to inform these groups of the proposed project and the project development schedule. The scoping process shall identify issues and alternatives to be addressed, determine the need for special studies, and identify sources of information. Environmental scoping techniques may include public notices and newsletters.

B10.4.1 Scoping Letter. The Contractor shall prepare a draft agency scoping letter informing the agencies of the project, identifying known protected resources, anticipated impacts and requesting information and comments. The agency scoping letter shall be sent out on the Contracting Agency's letterhead. A minimum 30 calendar day comment period shall be provided for the scoping letter.

B10.5 Cultural Resources

If determined necessary, the Contractor shall complete a cultural resource survey, provide a technical report meeting Office of History and Archaeology (OHA) requirements, prepare section 106 consultation letters, and other required 106 documents in accordance with the National Environmental Policy Act (NEPA) process.

B10.5.1 Research. Contractor shall perform background research that includes a review of relevant documents and literature regarding cultural resources investigations in and around the proposed project area. This is a required step to identify any known historic properties, determine if any previous surveys have occurred, and inform expectations of site types in the proposed project area.

B10.5.2 Field Survey. Contractor shall conduct a reconnaissance cultural resource survey with limited shovel testing to identify and evaluate historic properties located within the proposed Area of Potential Effect (APE). The Contractor shall meet with the Contracting Agency's Environmental staff prior to the field work.

The survey shall be performed in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (1983: 48 FR 44716). The survey crew shall be led by an archaeologist meeting the Secretary of the Interior Professional Qualification Standards for Archaeology. Buildings or structures will not be evaluated; however, if a building survey is deemed necessary, an architectural historian or historic architect meeting the Secretary of the Interior Professional Qualification Standards for Architectural History must be employed.

The Contractor shall be responsible for all permits and/or authorizations associated with the survey work.

B10.5.3 Report. Contractor shall prepare a complete archaeological report (draft and final versions) that will include all sections and data required by the Alaska OHA.

B10.5.4 Section 106 Letters. Contractor shall prepare draft section 106 initiation and findings letters. The letters shall be developed on Department letterhead and shall be signed by Department Cultural Resource Staff.

B10.6 Wetlands Delineation and Mapping

If determined necessary, the Contractor shall perform a wetland delineation and functional assessment to assist in regulatory permitting activities required for construction. The wetland delineation shall be performed in accordance with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Alaska Region (Version 2.0 - Sept. 2007) and the Corps of Engineers Wetlands Delineation Manual (January 1987).

The analysis team shall be led by an individual either holding a Professional Wetland Scientist (PWS) certification or with a minimum of five years' experience delineating wetlands in Alaska.

The assigned Contracting Agency's Environmental Impact Analyst shall be offered the opportunity to be present during and participate in field activities, and shall be notified two weeks prior to the commencement of work.

The Contractor shall be responsible for all permits and/or authorizations associated with the field work.

B10.6.1 Report. Contractor shall submit a draft technical report within 30 days of completing the field work. The final report shall be submitted within two business weeks of receiving the Contracting Agency's comments on the draft version. Wetland delineation line-work shall be submitted in addition to the technical report for incorporation into the Department's CAD drawings. The report shall include:

- A. Executive Summary – briefly discuss results of the delineation and functional assessment
- B. Introduction Section – discuss the general study area, site conditions, topography, etc.
- C. Methods Section – discuss field observation site selection and field work activities, mapping and analysis methodology, and wetland functional assessment, including the DOT&PF Alaska Wetland
- D. Assessment Method
- E. Wetland Indicator Section – discuss vegetation, soils, and hydrology of the field observation sites
- F. Results Section – discuss locations and classifications of wetlands within the study area
- G. Conclusions Section – discuss wetlands identified, associated functions and values, and jurisdictional recommendations
- H. References Cited
- I. Appendices – include all figures, field data and assessment forms, and site photographs
 - a. Include the following figures at a minimum: location & vicinity map, delineated wetlands within project area by classification and functional category
 - b. Figures should include a title block (with figure number and title, legend, north arrow, scale, project name and number), outside border, study area boundaries, mileposts, field observation sites, relevant locational information (cross streets, adjacent water bodies, nearest towns, etc.)

B10.7 Categorical Exclusion

The Contractor shall prepare Class of Action (COA) documentation and a Documented CATEx Determinations checklist including necessary figures and appendices. The checklist shall provide the documentation to demonstrate whether airport improvements meet the conditions and criteria for a CE as found in FAA Order 1050.1F and FAA Order 5050.4B. The checklist shall demonstrate the project is in compliance with applicable environmental laws, regulations, and executive orders. It shall also identify any mitigation, permits, licenses, clearances or other entitlements required for the proposed action.

B10.7.1 Review. The Contractor shall compile and submit CE documents and associated supporting documentation to the Department for review. The Contractor shall make all necessary revisions. Successive reviews may be required to ensure the document is in the proper format and the content is appropriate.

B10.7.2 Reevaluations. The Contractor shall perform any and all necessary Reevaluations of the approved Environmental Document in accordance with FAA Order 1050.1F and FAA Order 5050.4B.

B10.7.3 Completion Documentation. The Contractor shall compile original correspondence and related files on a CD, flash drive, and/or a tabbed, three-ring notebook(s), and transmit them to the Contracting Agency. Alternately, digital correspondence and files may be combined into a compressed (zipped) file and transmitted electronically via email or FTP service.

B10.8 Permitting

The Contractor shall acquire all environmental permits and certifications as necessary for the project. Permits may include, but are not limited to, the following:

- U.S. Army Corp of Engineers Section 404 Permit
- Section 401 Water Quality Certification
- Alaska Department of Fish and Game Title 16 Permit
- Local Government Flood Hazard Permits
- Local Government Conditional Use Permit
- Other applicable local, state, and federal permits

B10.8 Deliverable Items

Type of Document	Paragraph	Copies	Originals	.PDF
Scoping Letter	B10.4.2	1	1	1
Cultural Resources Report (Draft/Final)	B10.5.3	1	1	1
Section 106 Documentation	B10.5.4	1	1	1
Wetland Delineation Report(Draft/Final)	B10.6.1	1	1	1
Categorical Exclusion (Draft/Final)	B10.7	1	1	1
Categorical Exclusion Reevaluation(s)	B10.7.2	1	1	1
Permit Applications (each)	B10.8	1	1	1

ARTICLE B11 DESIGN ENGINEERING (Tasks 3-8)

B11.1 General

Design engineering includes: identifying feasible alternatives, evaluating these alternatives, and producing supporting documents that lead to the objective of this article: a “Plans, Specifications, and Estimate” (PS&E) assembly suitable for project bidding and construction. The product must meet the standards set forth in the list of Current FAA Advisory Circulars for AIP/PFC Projects available through the following website:

http://www.faa.gov/airports/resources/advisory_circulars/

Support the project environmental staff as required as they complete the required National Environmental Policy Act (NEPA) document, permitting, and other environmental clearance processes.

B11.2 Cost Effective Design

As part of the PS&E, evaluate alternatives for each major design element to determine the most cost effective design. Document the comparison of alternatives including a list of differing elements and the conclusion of the evaluation as well as the reasoning that supported the conclusion. Alternative comparisons are often based on the following issues:

- A. Minimum or desirable design criteria
- B. Right-of-Way requirements
- C. Utilities

- D. Environmental concerns including hazardous substances and wetlands
- E. The traveling public, both during and after construction
- F. Design Schedule
- G. Design, construction, and maintenance budgets
- H. Other considerations appropriate for specific circumstances

B11.3 Plan Set Composition

Assemble final plans in the order listed in Section 7.2 of the current Central Region Aviation Design Drafting Manual or as the Contracting Agency directs. Use detail drawings contained in the latest “State of Alaska, Department of Transportation and Public Facilities, Standard Drawings Manual” where applicable.

B11.4 Specifications

Update specifications according to the current version of the “State of Alaska, Department of Transportation and Public Facilities, Standard Specifications for Airport Construction” and the most current Federal Aviation Administration Advisory Circulars. If the Project requires materials not listed in these documents, prepare the required special provisions for Contracting Agency review and concurrence. Use performance specifications rather than method specifications whenever possible. Do not specify brand name material unless three are named, and if "or equivalent" is used, specify the criteria for judging the equivalence. **Do not specify sole source materials unless a sole source procurement authorization is obtained.** Combine these elements and submit specifications and special provisions according to prevailing policy and as further described in the contract. Digital files of standard specifications and standard modifications are available from the Contracting Agency.

B11.5 Modifications to Standards

B11.5.1 General. Provide a “Modifications to Standards” table that documents changes to FAA-approved State construction specifications. Include those that modify the provisions of Advisory Circular 150/5370-10, most recent version. Submit the table as outlined in the submittal requirements. Additionally, assist the Contracting Agency with creating a Modification to Standards request by providing data, documents, information, and any other items necessary to complete the process.

B11.5.2 Attorney General review of General Contract Provisions (GCPs). Separately submit modifications of GCP specifications to the Contracting Agency for approval by the State Attorney General at least 30 days prior to the Final PS&E submittal.

B11.6 Geotechnical Investigation

Geotechnical report and recommendations for the project area will be provided to the Contractor by the Contracting Agency. In addition, the Contracting Agency’s Materials Section will provide all geotechnical information needed for the project including the gathering of additional data, if required. The Contracting Agency reserves the right to negotiate and add geotechnical services.

B11.7 Conflicts With Existing Utilities/Storm Drains

The project area may include utilities and other improvements such as: underground telephone, electric, natural gas, water, petroleum, communication lines and storm drains. The Contracting Agency’s mapping includes located utility company facilities. Identify the need for utility relocations early in project development and concisely portray on the plans.

B11.7.1 Utility Relocation Design. Meet with the Contracting Agency to discuss potential utility conflicts and relocation options. The Contracting Agency is responsible for negotiation and finalization of all utility protection or relocation agreements and will make available to those designing the necessary utility relocations the PS&E assemblies, cross sections, and other reports, as appropriate, produced for this project. Provide assistance interpreting these documents and sharing other information about the project to those designing the utility relocations.

B11.7.2 Provided Items. The Contracting Agency will provide:

- Utility Locates (included in survey product)
- Negotiated Utility Agreements

B11.8 Estimate

Submit an Engineer's Estimate with the Engineer's Design Report (EDR) and with each of the plan reviews using the AASHTOWare® Program; see section B4.9.1. Use pay item numbers and names as given in the Standard Specifications, Standard Modifications, or Special Provisions, converted to the new numbering regime for AASHTOWare®. Obtain pay item numbers for items not listed in the Specifications from the Contracting Agency. Provide unit prices and total estimated costs for all items. The Contracting Agency will make historical records available for the determination of unit prices. Have the estimate signed and dated by both the preparer and checker. For review submittals, include copies of the estimate with the Specifications immediately behind the cover page.

B11.8.1 Confidentiality of Estimate. Do not release any information pertinent to the Engineer's Estimate, other than to the Contracting Agency, without express written authorization from the Project Manager.

B11.9 Quantity Computations

B11.9.1 General. Support each estimated quantity with written computations that detail the relevant source data, assumptions and allowances. Ensure documents created to determine pay item quantities contain sufficient information to allow the quantity for each pay item to be checked by starting from the source document. Reference these documents to the applicable pay item. Identify the respective individuals estimating and checking each computation. In addition to computations for individual features, include summary computations where applicable.

B11.9.2 Lump Sum Estimates. Include assumptions of lump sum estimates as well as unit quantity estimates. Detail the base assumptions that have been made in the lump sums (e.g., what type and quantity of electrical components were included in a lump sum electrical work item, what was the assumed cost of discrete items included in the lump sum calculations, etc.). Ensure any cost information is excluded from the final quantity computation binder. Submit lump sum cost information with the Engineer's Estimate.

B11.9.3 Cross Sections. Where cross-sections are used to support earthwork volumes, prepare them at horizontal and vertical scales that clearly represent the proposed work. Select plotting ratios from those commonly available on triangle scales. Select ratios that show the structural section layers. With each volume computation, include the typical section showing the element widths, cross-slope rates and excavation foreslope and backslope ratios. Show the original ground and finished ground on a grid that is labeled with station, elevation and offsets. Where pertinent to project issues, show the offset of imaginary surfaces such as limits of safety areas and object free areas, as well as the elevation and offset of catch points.

For volume computations based on cross-section areas, tabulate areas, incremental volumes, and mass ordinates.

B11.10 Engineer's Design Report (EDR) - (Task 3)

B11.10.1 General. Provide an Engineer's Design Report (EDR) that meets the requirements of the Aviation Preconstruction Manual.

B11.10.2 Estimates. Create construction cost estimates consistent with the level of report submittal. See section B11.8.

B11.10.3 Reviews and Schedule. Submit a draft EDR with the Plans in Hand assembly. The Contracting Agency will return written comments within four weeks after the submittal is accepted. Address these comments to the Contracting Agency's satisfaction prior to making the final submittal. Submit the final Engineer's Design Report, sealed and signed by the supervising registered Civil Engineer within two weeks of receiving final Contracting Agency comments.

B11.10.4 Approval. Address Contracting Agency comments and make corrections until the Contracting Agency approves the report. Upon approval, make any final corrections and submit originals of the report to the Project Manager for reproduction as necessary.

B11.11 Construction Safety and Phasing Plan (CSPP) – (Task 4)

Coordinate with the Contracting Agency to establish safety requirements for the Construction Contractor's operations and to maintain airport operations.

B11.11.1 Draft CSPP. Based upon information provided by the Contracting Agency, prepare a CSPP (and include in the PIH submittal) meeting the requirements of AC 150/5370-2, most recent version. In addition to airport operations, address impacts of the Construction Contractor's use of the public road system in the vicinity of the airport.

B11.11.2 FAA Review. Incorporate comments resulting from the Plans in Hand review into the CSPP and submit a revised draft to the Contracting Agency. The Contracting Agency will submit the draft CSPP for FAA review.

B11.11.3 Final CSPP. Incorporate all comments from the Contracting Agency and FAA into the final CSPP. Submit the final CSPP to the Contracting Agency for FAA concurrence at the time of the final EDR submittal.

B11.12 Erosion and Sediment Control Plans (ESCP) – (Task 6)

Provide Erosion and Sediment Control Plans according to the Central Region ESCP template. Submit the draft ESCP with the PS&E review submittal. Incorporate all comments and provide the final document with the final PS&E submittal.

B11.13 Plans, Specifications, and Estimate (PS&E) Package - (Tasks 5, 7, & 8)

Complete a bid-ready PS&E package as outlined below.

B11.13.1 Plans in Hand (PIH) Description - (Task 5). Prepare draft contract documents addressing the primary elements the project. Provide preliminary plans and estimate for the PIH Review that are at least 75% complete.

B11.13.1a. Specifications reflect the level of completeness of the plan set and estimate. Include all appropriate pay items and include drafts of any significant project-specific specifications. Discuss these with the Contracting Agency before submitting the review documents.

B11.13.1b. Construction Duration Estimate. Include a recommended number of calendar days for the construction contract or a recommended construction contract completion date based on the anticipated bid date of the project.

B11.13.1c. Work Description. Include a brief (one or two sentence) description of the work required to construct this project for use in the review distribution. This statement will ultimately appear as the bid calendar description.

B11.13.1d Deliverable Items - Plans in Hand Review.

Type of Document	Paragraph Reference	Paper Originals	Digital files
Draft EDR	B11.10	8 ½ x 11"	MS Word, .pdf
Draft CSPP	B11.11	8 ½ x 11" or 11 x 17	Microsoft Word, .pdf, AutoCAD
Plans	B4.8, B11.3	11 x 17"	AutoCAD, .pdf
List of anticipated specifications, pay items, and special provisions.	B4.9, B11.4	8 ½ x 11"	MS Word, .pdf
Engineer's Estimate and Bid Schedule	B11.8	8 ½ x 11"	MS Word, .pdf
Quantity computations	B11.9	8 ½ x 11"	MS Word, .pdf
Construction Duration Estimate	B11.13.1b	8 ½ x 11"	MS Excel, .pdf
Project Description	B11.13.1c	8 ½ x 11"	.pdf

B11.13.2 Plans, Specifications, and Estimate (PS&E) Review - (Task 7). Revise the contract documents according to the comments and responses from the PIH Review. Provide plans, specifications, and estimate for the PS&E review that is 95%-98% complete.

B11.13.2a. Adjudicated PIH review comments. Provide the comments and responses from the PIH review meeting and a summary memo to the Project Manager. Format all responses in the past tense (e.g. "have done," "changed," etc.).

B11.13.2b. Significant change memo. Provide a memo to the Project Manager summarizing any significant design changes between the PIH review meeting and the PS&E review submittal that were not captured in the adjudicated PIH review comments.

B11.13.2c. Draft Mod to Standards memo. Provide a draft Modifications to Construction Standards memo based on the Contracting Agency's template.

B11.13.2d. Deliverable Items – PS&E Review.

Type of Document	Paragraph Reference	Paper Originals	Digital files
Final EDR	B11.10	8 ½ x 11"	Microsoft Word, .pdf
Final CSPP	B11.11	8 ½ x 11" or 11 x 17	Microsoft Word, .pdf, AutoCAD
Plans	B4.8, B11.3	11 x 17"	AutoCAD, .pdf
Specifications and Special Provisions	B4.9, B11.4	8 ½ x 11"	Microsoft Word, .pdf
Engineer's Estimate and Bid Schedule	B11.8	8 ½ x 11"	Microsoft Word, .pdf, Microsoft Excel
Quantity computations	B11.9	8 ½ x 11"	Microsoft Word, .pdf, Microsoft Excel
Construction Duration Estimate	B11.13.1b	8 ½ x 11"	Microsoft Word, .pdf
Project Description	B11.13.1c	8 ½ x 11"	Microsoft Word, .pdf
Draft ESCP	B11.12	8 ½ x 11" or 11 x 17	Microsoft Word, .pdf, AutoCAD
Adjudicated PIH Review Comments	B11.13.2a	8 ½ x 11" or 11 x 17	Microsoft Word, .pdf, AutoCAD
Significant change memo	B11.13.2b	8 ½ x 11"	Microsoft Word, .pdf
Draft Mod to Standards Memo	B11.13.2c	8 ½ x 11"	Microsoft Word, .pdf

B11.13.3 Final Plans, Specifications, and Estimate (PS&E) - Group A (Task 8).

Finalize the Contract documents based on comments from the PS&E review. Include the indicated products that were listed for changes in a previous review. Documents will not be accepted until comments have been addressed to the Contracting Agency's satisfaction. Prepare documents that are ready for advertising for construction bids as identified below.

B11.13.3a. Final Check Set. Provide a final unsigned plan set for final comments by the Contracting Agency. Incorporate any comments received into the plans before signing and sealing the final plan sheets.

B11.13.3b. Engineering Seals. Submit final plan sheets sealed by a Professional Civil Engineer or Electrical Engineer, as appropriate, currently registered in the State of Alaska who is in responsible charge for the work. Sign plan sheets in blue waterproof ink. Digital signatures will not be accepted. Do not sign ESCP or CSPP sheets.

B11.13.3c. Deliverable Items – Final PS&E.

Type of Document	Paragraph Reference	Paper Originals	Digital files
Final EDR	B11.10	8 ½ x 11"	Microsoft Word, .pdf
Final CSPP	B11.11	8 ½ x 11" or 11 x 17	Microsoft Word, .pdf, AutoCAD
Unsigned Check Set Plans	B11.13.3a	11 x 17"	.pdf
Specifications and Special Provisions	B4.9, B11.4	8 ½ x 11"	Microsoft Word, .pdf
Engineer's Estimate and Bid Schedule	B11.8	8 ½ x 11"	Microsoft Word, .pdf, Microsoft Excel
Quantity computations	B11.9	8 ½ x 11"	Microsoft Word, .pdf, Microsoft Excel
Construction Duration Estimate	B11.13.1b	8 ½ x 11"	Microsoft Word, .pdf
Project Description	B11.13.1c	8 ½ x 11"	Microsoft Word, .pdf
Final ESCP	B11.12	8 ½ x 11" or 11 x 17	Microsoft Word, .pdf, AutoCAD
Adjudicated PS&E Review Comments	B11.13.2a	8 ½ x 11" or 11 x 17	Microsoft Word, .pdf, AutoCAD
Significant change memo	B11.13.2b	8 ½ x 11"	Microsoft Word, .pdf
Final Mod to Standards Memo	B11.13.2c	8 ½ x 11"	Microsoft Word, .pdf
Final Signed and Sealed Plans	B11.13.3a	11 x 17"	AutoCAD, .pdf

B11.14 Review Meetings – (Tasks 5 & 7)

The Contracting Agency will host a review meeting to discuss the PSE&E review comments. Attend the review meetings (PIH and PS&E) and note any discussions that resolve comments or develop consensus.

B11.14.1 Pre-meeting comment responses. The Contracting Agency will provide the Contractor a list of compiled comments two days before the review meeting. Provide preliminary responses to the comments before the review meeting to facilitate a faster review.

B11.14.2 Post-meeting comment resolution. Provide a memo to the Project Manager that lists the comments and proposed responses within two weeks after each meeting and promptly revise any draft responses according to Contracting Agency requests. Provide a finalized list of adjudicated comments and responses once comments are resolved.

B11.14.3 Adjudication Meeting. The Project Manager may elect to conduct a separate adjudication meeting to address significant comments received during the review. Attend the adjudication meeting and provide written responses to all comments received (See B11.14.2).

B11.15 Items provided to the Contractor

The Contracting Agency will provide the following:

- A. Erosion and Sediment Control Plan Template
- B. Project Geotechnical Report and Recommendations
- C. Modification to Construction Standards memo template
- D. Digital files of standard specifications

ARTICLE B12
AIRPORT LAYOUT PLAN (ALP)
(Task 9)

B12.1. General

Develop an ALP consistent with the standards and guidelines listed below. Coordinate with the Contracting Agency prior to beginning work to ensure all standards and expectations are mutually understood.

B12.2 Standards and Guidelines

Adhere to guidance from the following list of documents. All versions of documents listed below are for reference only. Future versions also apply to this contract as they become available.

- AC 150/5300-13A “Airport Design”
- AC 150/5070-6B “Airport Master Plans”
- 14 Code of Federal Regulations Part 77
- ARP SOP 2.00 “Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)”
- Exhibit B-3: ALP Guidance
- Aviation Design Drafting Manual, Alaska Department of Transportation & Public Facilities Central Region, Aviation Design

Direct questions about the interpretation and coordination of the above resources to the Contracting Agency.

B12.3 Services

Provide all services needed to create the ALP as described. This includes at a minimum:

- A. all survey work necessary to complete an ALP as described in Table 2-1 of AC 150/5300-18B.
- B. wind analysis
- C. airport operations summary, analysis, and forecasting
- D. review of design standards

B12.3.1 Scoping Meeting. Attend a meeting with the Contracting Agency before commencing work on the ALP to determine the level of effort required for each ALP. Existing information may be drawn from the existing ALP on a case-by-case basis. Some drawing updates may not be required when performing minor updates or as-built updates to ALPs, but only when directed as such by the Contracting Agency.

B12.3.2 Airport Layout Plan drawing form and content. Follow the ALP Guidance in the contract and as directed by the Contracting Agency. Include drawings as required by the manual and as Directed by the Contracting Agency.

For each airport, produce an ALP to include the new survey data, obstruction data, topographic data, and planimetric data gathered in the Survey. This includes, but is not limited to:

- A. contract survey deliverables
- B. land use inventory
- C. airspace conflicts analysis for objects affecting navigable airspace (14CFR Part 77, Subparts A and C)
- D. the most recent construction asbuilts

B12.3.2a As-built ALPs. Provide ALPs conforming to the as-built ALP standards as referenced in Appendix B-3, using the existing drafting techniques of the approved ALP.

B12.3.3 Supporting Documents.

B12.3.3.1 FAA Forms. Support the Contracting Agency in updating or completing FAA forms such as the Airport Master Record (5010-1) form, the Notice of Landing Area Proposal (7480-1) form, the AVN Data List, and any other forms the project requires.

B12.3.3.2 Estimates, Capital Spending Plan, and quantity calculations. Estimate project costs as described in the ALP narrative. Provide the Contracting Agency a quantity and estimate notebook showing all assumptions of cost, material quality, and other associated large-scale costs. Provide an estimate that is accurate to $\pm 50\%$. The level of detail in the quantities and calculations should reflect the relative accuracy of the estimate.

B12.3.3.3 Supporting Calculations. Provide the contracting Agency background calculations for all submittals as applicable. This includes, but is not limited to, wind analysis, magnetic declination calculations, threshold coordinate calculations and checks, and BRL calculations.

B12.3.3.4 Design standards report. Provide, in addition to the ALP Narrative Report described in Section 3.6 of this Article, a report describing design standard discrepancies. If the discrepancies are a result of a change in aircraft operations data, provide a recommended design designation (Airport Reference Code, Runway Design Codes, and Taxiway Design Groups for each facility) to the Contracting Agency before beginning work on the ALP drawings. The Contracting Agency will provide design designations for the airport and each runway based in part on these recommendations.

B12.3.3.5 ALP checklists. Provide with each ALP submittal a completed ALP SOP 2.00 checklist and a completed DOT CR ALP checklist.

B12.3.4 Digital ALP Drawings. Provide AutoCAD files compatible with the Contracting Agency's current edition. Provide all drawings in the orthographic coordinate system directed by the Contracting Agency.

B12.3.4.1 Surfaces. Provide all surfaces used in the development of the ALP in AutoCAD Civil 3D .dwg format.

B12.3.4.2 Planimetry. Provide all linework in the digital drawing on unique layers. See the Central Region Drafting Guidance document. TINs (B7.6.H & B9.2). Control Summary (B7.6.D). Field Books (B7.6.A)

B12.3.4.3 Points. Provide all point attribute data as AutoCAD Civil 3D Points and provide a summary .txt or .csv file of the points in PENZD format (Point, Easting, Northing, Elevation, Description).

B12.3.5 Hard Copies. Provide review submittals on 11x17 bond paper. Submit 2 copies of the final product on 4 mil Mylar, approved by the Contracting Agency (See Sec. B4.8.7). Also provide an 11 x 17 bond copy.

B12.3.6 ALP Narrative. Provide all sections as required by the Project Manager.

B12.3.7 TINs

B12.3.7.1 Existing Ground. Define the existing ground surface by creating a TIN capable of accurately generating four foot contours within the Airport Boundary and ten foot contours within the outer boundary of the 14 CFR Part 77 conical surface. Follow methods as outlined in Articles B8 and B12.

B12.3.7.2 Part 77. Provide a Part 77 TIN accurately depicting all of the airport's Part 77 imaginary Surfaces (primary, transitional, horizontal, conical, and approach) and their relationship to each other. Incorporate fault lines as necessary to provide an accurate product. Provide both a combined TIN of the most demanding surfaces, and individual TINs of each surface.

B12.3.7.1 Threshold Siting Surfaces. Provide Individual surface TINs for Threshold Siting Surfaces as defined in AC150/5300-13A, NAVAID siting surfaces, and/or other surfaces as directed by the Contracting Agency. Refer to AC 150/5300-13A, Airport Design and AC 150/5070-6B, Airport Master Plans.

B12.4 Schedule

See Exhibit B-2

B12.5 Reviews

B12.5.1 Contracting Agency Review. Submit the ALP to the Contracting Agency according to the project schedule in **Exhibit B-2**, when it is 95% complete. If the submittal is acceptable, the ALP will be reviewed by the Contracting Agency and comments will be provided within 30 days. Incorporate all comments as directed by the Contracting Agency.

Provide with the review set:

- A. Draft ALP drawing set
- B. ALP narrative report (as applicable)
- C. Completed FAA SOP 2.00 ALP checklist. Items that do not adhere to the checklist require an alternative plan to address the required information and discussion with the Contracting Agency.
- D. Completed Central Region ALP Checklist.
- E. Drafts of any required modifications to design standards
- F. Drafts of requests for any required letters of determination for non-standard conditions.
- G. Supporting calculations and estimates in section 3.3 of this article.

B12.5.2 FAA Review. After the Contracting Agency review has been completed and comments have been satisfactorily addressed, the Contracting Agency will submit the ALP to FAA for their review. FAA will review the ALP and provide comments within 45 days. Incorporate all comments and any additional comments as directed by the Contracting Agency.

Provide final versions of all documents submitted for the Contracting Agency review along with adjudicated comments from the Contracting Agency Review.

B12.5.3 Final Submittal. After FAA has reviewed and accepted the ALP and all revisions, submit two of 22 x 34" mirrored Mylar copies and one 11 x 17" paper copy for signature to the Contracting Agency.

B12.6 Deliverable Items

Submit the following. Submit Digital files on a CD, DVD, or flash drive.

B12.6.1 Draft ALP

Type of Document	Section Reference	Hardcopy Originals	Digital files
Fields Books	B8.4	11 x 17"	AutoCAD, .pdf
Control Summary	B9.2		
TINs	B8.7		
Orthophoto(s)	B9.3.3.1		
Design Standards Report	B12.3.3.4		
Draft ALP	B12.3.2, B12.5.1		
Draft ALP Narrative	B12.3.6	8 ½ x 11"	Microsoft Word, .pdf
Completed FAA SOP checklist	B12.3.3	8 ½ x 11"	.pdf
Completed DOT CR checklist	B12.3.3	8 ½ x 11"	Microsoft Word, .pdf
Supporting documents	B12.3.3	N/A	Microsoft Word, .pdf
Capital Spending Plan Estimate	B12.3.3	N/A	Microsoft Word, .pdf, Microsoft Excel
Quantities and Calculations	B12.3.3	N/A	Microsoft Word, .pdf, Microsoft Excel
5010 Master Record Redlines	B12.3.3	8 ½ x 11"	AutoCAD, .pdf

B12.6.2 Final ALP

Type of Document	Section Reference	Hardcopy Originals	Digital files
Fields Books	B8.4	11 x 17"	AutoCAD, .pdf
Control Summary	B9.2		
TINs	B8.7		
Orthophoto(s)	B9.3.3.1		
Draft ALP			
Draft ALP Narrative	B12.3.6	8 ½ x 11"	Microsoft Word, .pdf
Completed FAA SOP checklist	B12.3.3	8 ½ x 11"	.pdf
Completed DOT CR checklist	B12.3.3	8 ½ x 11"	Microsoft Word, .pdf
Final ALP	B12.3.2	11 x 17" (bond), 22 x 34"	AutoCAD, Microsoft Word, .pdf
Final ALP Narrative	B12.3.6	8 ½ x 11"	Microsoft Word, .pdf
Final FAA SOP Checklist		8 ½ x 11"	.pdf
Adjudicated ALP comments	B12.5.2	8 ½ x 11" or 11 x 17"	Microsoft Word, .pdf, Microsoft Excel
Supporting documents	B12.3.3	N/A	Microsoft Word, .pdf
Capital Spending Plan Estimate	B12.3.3	N/A	Microsoft Word, .pdf, Microsoft Excel
Quantities and Calculations	B12.3.3	N/A	Microsoft Word, .pdf, Microsoft Excel
5010 Master Record Redlines	B12.3.3	8 ½ x 11"	AutoCAD, .pdf

ARTICLE B13
ASSISTANCE DURING BIDDING
(Task 10)

B13.1 General

Assist the Contracting Agency as requested during project bidding. Personnel who were in responsible charge for engineering and other personnel, as necessary and appropriate, shall be available to interpret and clarify documents prepared during project development and to assist with preparing any necessary addenda to the bid documents. When performing these services, do not communicate about this project with any potential bidders.

B13.2 Documents

Within one month after the bid opening, submit the original of all documents prepared or modified during bidding. Keep a copy of these documents until construction is complete.

ARTICLE B14
ASSISTANCE DURING CONSTRUCTION
(Task 11)

B14.1 General

Assist the Contracting Agency as requested during project construction. Make available personnel who were in responsible charge for engineering, land surveying, and other personnel as necessary and appropriate, to:

- interpret and clarify documents prepared during project development and bidding;
- review and approve shop drawings, electrical materials/catalog cuts submittals, retaining wall forming plans, trench stability designs, and landscaping materials and procedures; and
- to assist with preparing any necessary change order documents.

Do not communicate directly about this project with the successful bidder. Route all communication through the Contracting Agency.

B14.2 Documents

Within a month after the Contracting Agency accepts the constructed project, submit the original of all documents prepared or modified when performing the services for this task.

ARTICLE B15 **UTILITY AGREEMENTS** **(NIC)**

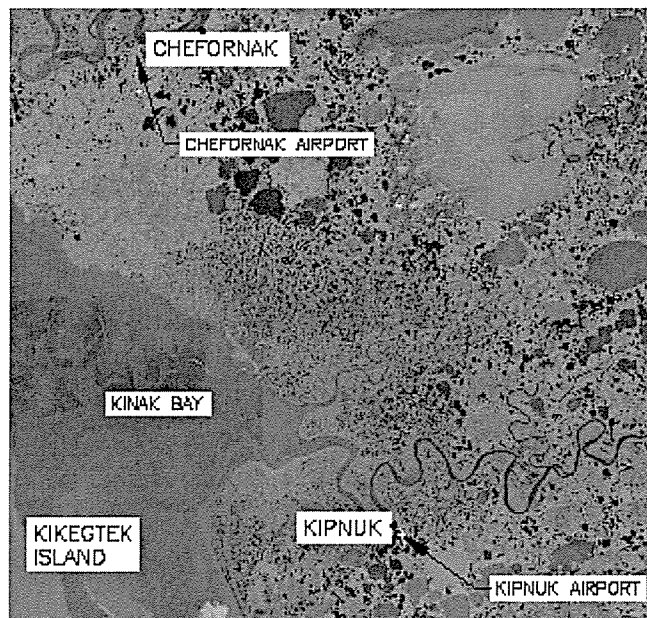
The Contracting Agency reserves the right to add Utility Agreements by amendment. However, the Contracting Agency is under no obligation to do so and reserves the right to complete the services by any other means, including the use of in-house forces.

EXHIBIT B-1 **PROJECT LOCATION MAPS**



ALASKA CENTRAL REGION **LOCATION MAP**

NOT TO SCALE



VICINITY MAP

T 1 N, R 24 W SEC. 18 & 30
T 3 S, R 24 W SEC. 10 & 11
SEWARD MENDHAM

EXHIBIT B-2
PROJECT SCHEDULE

Milestone	Date
Design NTP	March 2020
Final Deliverable Submittal	February 2021
Advertise for Bids	March 2021